

P.G.M. Hebinck

The Agrarian Structure in Kenya: State, Farmers and Commodity Relations

Nijmegen Studies in Development
and Cultural Change
ISSN 0935-7173

Published by
Nijmeegs Instituut voor Comparatieve
Cultuur- en Ontwikkelingsstudies
(NICCOS)

Nijmegen Studies in Development and Cultural Change

Board of editors:

Prof. Dr. J. Breman (University of Amsterdam)

Prof. Dr. P. H. J. M. Camps (Catholic University, Nijmegen)

Prof. Dr. H. Hoetink (University of Utrecht)

Prof. Dr. G. Huizer (Catholic University, Nijmegen)

Mrs. Dr. W. Jansen (Catholic University, Nijmegen)

Prof. Dr. J. M. G. Kleinpenning (Catholic University, Nijmegen)

Prof. Dr. J. R. T. M. Peters (Catholic University, Nijmegen)

Dr. R. Peters (University of Amsterdam)

Prof. Dr. W. G. Wolters (Catholic University, Nijmegen)

Verlag **breitenbach** Publishers

Memeler Str. 50, 6600 Saarbrücken, Germany

P.O. B. 16243, Fort Lauderdale/Plantation

Fla. 33318-6243, USA

The Agrarian Structure in Kenya:

State, Farmers and Commodity Relations

een wetenschappelijke proeve
op het gebied van de sociale wetenschappen

Proefschrift

ter verkrijging van de graad van doctor aan
de Katholieke Universiteit te Nijmegen,
volgens besluit van het college van decanen in het
openbaar te verdedigen op dinsdag 11 december 1990
des namiddags te 1.30 uur precies

door Paulus Gerardus Maria Hebinck
geboren op 9 januari 1953
te Enschede

Promotor: Prof. dr. G. Huizer

Co-promotor: Dr. D. Haude

PREFACE

Thus thesis studies processes underlying structural change in the agricultural sector of Kenya. My interest in Kenya dates back to 1979/1980 when I formed part of a student-team carrying out an urban research project in Kisumu. Later on, as a lecturer at the Third World Centre of the Catholic University of Nijmegen, my research activities shifted to the complex dynamic of agrarian change in Africa as a whole, and Kenya in particular.

The subject agrarian change has, however, a very wide scope, so necessitating a certain restriction of the research project. Focusing the study, though, was not easy. It appeared to be a process taking more time than I ever expected. Chapter 1, containing a theoretical outline of how to analyze agrarian change, is proverbial for this statement.

Doing research and writing a thesis have also other aspects working, discussing and arguing with a wide variety of people, whether they be Kenyan farmers, colleagues and friends or bureaucrats. The various visits to Kenya, between 1985 and 1988, were not only in a scientific sense interesting. The different people I met and the friends I made during my stay had a energising effect on me. Energising ranges in this respect from scientific discussions and exchanging political ideas which broadened on many occasions my own views, to pleasant gatherings and being part of the bubbling nightlife of Nairobi, Kisumu and Kapsabet. There are so many people in Kenya to thank that I cannot name them all. A few people/friends cannot be left unnamed. First there are Jan Vossen and Ria Olofsen who invited me to stay, live and work in their house during the time I was in Nairobi. I enjoyed staying with them very much, as they brought me into contact with Allart, Pien, Jan, Mieke, and so many others. Jan and Ria in particular showed such a lot of enthusiasm for African music that since then Franco, Simba Wanyika, etc. are in my ears. It was also pleasant to meet my old friend John Ndegwa again. Thanking people in Kenya, I must not forget James and Tricia in Kisumu sharing with me several pleasant social gatherings and giving me support.

The Institute for Development Studies of the Nairobi University assisted me in receiving a research permit for Kenya and put a working room and their library at my disposal.

In the Kapsabet region, I want to express my gratitude towards the people who assisted me in my research endeavours. First of all Jan Helder, whose help and knowledge were indispensable. He assisted me in drawing the sample while I was in Kisumu repairing the car, conducting interviews and made the evenings in Kapsabet less dull. Jan's input in processing a first analysis of the research results was a great contribution. Linet Chagwira and Faith Kogo were the best interpreters I met in my life. Gratitude also for the people who worked at that time in Kapsabet Hotel, the District Agricultural Officers' bureau and the Land Registration Department in the District Commissioners Office. I am also thankful to William Ambaru and his family in Kapkanganu sub-location who, without any restrictions, introduced me to

the world of the middle peasantry in Nandi district. He truly proofed to me that farmers are 'knowledgeable' and 'capable'.

It seems to be a customary for Ph.D candidates to refer to the support of their own family in the last lines of the preface. Since my wife Monique and my children Bram, Maarten and Aniek probably suffered the most of my moods and of my long days during the week and the week-ends I spent in my working room behind the computer, I would make a serious mistake to follow that custom. Their enduring support cannot be expressed in words. One thing is obvious, however, they informed frequently about the progress and were glad that the book was finished.

Back home, in the Netherlands, various other people also contributed, willingly and unwillingly, their share. I highly valued comments of my colleagues of the Third World Centre of the Catholic University of Nijmegen and of the Department of the Sociology of Rural Development of the Wageningen Agricultural University. My promotor, Gerrit Huizer, and co-promotor, Detlev Haude, appeared to be very good readers and commentators on the various drafts of the different chapters. They pointed at many ambiguities thereby forcing me to reformulate and to reconsider certain sections. Paul Hoebink, Frans Schuurman, Hans Siebers, Wilma Roos, Francien van Driel and Luuk Knippenberg of The Third World Centre, and Jan Douwe van der Ploeg, Chris Martin and Jan Kees van Donge of the Department of Sociology of Rural development also had their share in this process, as commentators, friends and colleagues. A particular kind of acknowledgement is directed to the chairman of the Wageningen department, Norman Long, enabling me to finish my thesis.

Chris Visscher of the Research Technical Department of the Catholic University of Nijmegen deserves credit as he assisted and taught me how to undertake regression analysis and to interpret the results. Dick Foeken of the African Study Centre in Leiden complied frequently with my requests for additional statistics. Maarten Slooves and Paul Wissink showed their talents of drawing the maps and figures incorporated in this book.

Finally, last but not least, although she really was the last person who has contributed, I must thank Catherine O'Dea for her excellent editorial work. Despite the time pressure, forcing her to alter her normal editing procedure, she managed to transform my Dutch-English into English. She did a great job, also by pointing at many ambiguities in the text. The final responsibility for the text English is, of course, completely in my hands.

The pressure unwillingly exercised on me by the director of the Nijmegen Institute for Comparative Studies in Development and Cultural Change (NICCOS), to meet the deadline, was after all not experienced as unpleasant.

Paul Hebinck
Cuyk, October, 1990

CONTENTS

PREFACE	v
LIST OF TABLES	xi
LIST OF FIGURES	xii
LIST OF MAPS	xiii

Chapter 1. TOWARDS A THEORETICAL FRAMEWORK FOR THE ANALYSIS OF AGRARIAN CHANGE	1
---	----------

Introduction and presuppositions	1
1.1. Commoditization, institutionalization and intervention	5
1.1.1. Commoditization	6
1.1.2. Institutionalization	8
1.1.3. Intervention	10
1.2. The outcome of intervention in agriculture in Africa: competing views and cures	14
1.3. Agrarian structure and heterogeneity	15
1.3.1. Heterogeneity is inherent in agriculture	16
1.3.2. Differential degrees of commoditization	16
1.3.3. Heterogeneity and differentiation	19
1.3.4. The reproduction of heterogeneity through intervention, commoditization and institutionalization	21
1.4. Focusing the study: state intervention in agriculture	25
1.4.1. Research questions, data collection and levels of analysis	30
1.5. Outline of the thesis	31
Notes	33

CHAPTER 2. THE COLONIAL HISTORY OF COMMODITIZATION IN KENYA AND THE STATE	41
--	-----------

Introduction	41
2.1. Pre-colonial Kenya	42
2.2. The period 1895 to 1930	44
2.3. The Great Depression and its aftermath	49
2.3.1. Politico-economic developments in the Reserves	50
2.3.2. White settler agriculture during the Great Depression and after	54
2.4. Post-war policy reforms and the transfer of state power	57
2.5. Conclusions	61
Notes	62

CHAPTER 3. STATE INTERVENTION IN AGRICULTURE SINCE INDEPENDENCE 68

Introduction	68
3.1. The leading role of the state	68
3.2. State intervention in agriculture: policy objectives and formulation	69
3.2.1. Financial-economic determinants for policy formulation	70
3.2.2. The evolution of policy formulation	75
3.3. Policy instruments for intervention	79
3.3.1. State intervention through boards and parastatals	82
3.3.2. State intervention through joint ventures	84
3.3.3. Import regulations	85
3.3.4. Price fixation	87
3.3.5. Cooperative movement	87
3.4. The role of foreign aid in the implementation of policy	89
3.4.1. The evolution of foreign aid arrangements and allocation	91
3.5. Conclusions	94
Notes	96

CHAPTER 4. THE RHYTHMS OF AGRARIAN CHANGE SINCE INDEPENDENCE 99

Introduction	99
4.1. The land question and land reform	100
4.2. Shifting land-use patterns	103
4.3. Smallholder and large farm production	105
4.4. Agricultural inputs and labour use in agriculture	109
4.5. Differentiation in Kenya	111
4.5.1. Regional differences in commoditization	113
4.5.2. Socio-economic differentiation	118
4.5.2.1. Income distribution and poverty in smallholder agriculture	118
4.5.2.2. Distribution of land	123
4.6. Conclusions	126
Notes	128

CHAPTER 5. THE HISTORICAL PATTERNS OF COMMODITIZATION IN NANDI DISTRICT: FROM RESISTANCE TOWARDS CO-OPTATION 133

Introduction	133
5.1. Nandi district: general information	133
5.2. History of commoditization in Nandi district	139
5.2.1. The pre-colonial period	140
5.2.2. The imposition of colonial rule and the Nandi Uprising	143
5.2.3. The 1930s and the gradual expansion of commodity production	150
5.2.4. The 1950s and the 'agrarian revolution'	155
5.2.5. Expansion of commodity production since the 1960s	158
5.2.5.1. Maize production	159
5.2.5.2. Livestock and milk	161
5.2.5.3. Tea cultivation	163

5.2.5.4. Other crops	164
5.3. Conclusion	165
Notes	166
CHAPTER 6. COMMODITIZATION AND HETEROGENEITY IN NANDI DISTRICT RESULTS OF A FARM SURVEY	169
6.1. Ownership and distribution of means of production land	171
6.2. Mobilization of labour for maize farming	173
6.3. Ownership and distribution of means of production: implements for maize farming	175
6.4. Labour processes and farming styles in the sample area: cultivation techniques and farming intensity	175
6.5. Production and reproduction of the farm enterprise and the household: incorporation into the market	179
6.5.1. Commoditization of maize and milk	180
6.5.2. Consumption needs and the market	184
6.5.3. The importance of straddling	184
6.5.4. Distribution of income	187
6.6. The institutional environment for farming in Nandi	188
6.6.1. Agricultural credit	189
6.6.2. Extension service	189
6.6.3. Input supply and marketing	190
6.7. Rural differentiation in Nandi district.	191
6.7.1. Differentiation and commodity production in Nandi district: wealth and crisis	194
6.8. Farming styles and rural differentiation: explaining heterogeneity	198
6.9. Conclusions	202
Notes	205
CHAPTER 7 THE NATURE OF STATE INTERVENTION IN AGRICULTURE THE CASE OF THE NATIONAL FOOD POLICY	208
Introduction	208
7.1. Hybridization of maize	209
7.1.1. Claims of success of hybridization	212
7.2. Institutional factors affecting the implementation of the National Food Policy	215
7.2.1. Marketing and maize marketing in particular	215
7.2.2. Pricing policies	219
7.2.2.1. Food consumer prices	219
7.2.2.2. Deteriorating international terms of exchange and its impact on production	220
7.2.2.3. Consumer and national producer prices: the case of milk versus maize	222
7.2.2.4. Domestic terms of trade: industrial versus agricultural sector	223

7.3. The role of agro-institutions	226
7.3.1. The orientation and role of agricultural research	226
7.3.2. Extension services	230
7.3.2.1. The nature of the message	230
7.3.2.2. The nature of the linkages	231
7.3.3. Distribution of agricultural credit	233
7.4. Conclusions	236
Notes	238
 CHAPTER 8. AGRICULTURAL POLICY IN RETROSPECT: THE STATE AND STATE-SOCIETY RELATIONS IN KENYA	 243
Introduction	243
8.1. An analytical framework	243
8.2. Political intervention and state-society relations after independence: the nature of state power	246
8.2.1. The politico-economic determinants of state intervention: state- society relations	252
8.2.2. A change in the nature of state power ?	255
8.3. Commoditization, institutionalization and state intervention in retrospect	262
Notes	268
 CHAPTER 9. EPILOGUE AND FUTURE RESEARCH	 274
Introduction	274
9.1. Looking back	274
9.2. Other major conclusions	276
9.3. A future research agenda	278
 APPENDIX 1. THE NANDI SURVEY	 283
REFERENCES	287
CURRICULUM VITAE	309

List of Tables

Table 3.1. Increase in recorded marketed agricultural production purchased by Marketing Boards in Kenya, 1946-1988, for selected crops ('000 tons)	71
Table 3.2. Indicators of economic development, government income and expenditures in Kenya, various years	73
Table 3.3. Current external and loan accounts, 1968-1989 for selected years (in K£ million)	74
Table 3.4. Share of cooperatives in marketed production 1979-1988	88
Table 4.1. Number of holdings in the large farm sector, 1954-1987	101
Table 4.2. Area planted by crop in selected years on large farms	104
Table 4.3. The share of large and small farms in recorded marketed production to Marketing Boards, 1955-1988	105
Table 4.4. Classification of Kenya's smallholder community by ILO mission, 1972	118
Table 4.5. Average value of income, expenditures and savings by households income group	119
Table 4.6. Share of average value of marketed output (Ksh) by holding size group (ha.), 1974/1975	121
Table 4.7. Distribution of holdings by holding size, 1974/75-1978/1979 (%)	124
Table 4.8. Ownership of surveyed mixed farm land in Nakuru, 1974	125
Table 5.1. Administrative set-up Nandi district	133
Table 5.2. Population growth in Nandi district, 1931-1988	134
Table 5.3. Agro-ecological zones (AEZ) in Nandi district, in '00 ha.	136
Table 5.4. Land use and land available for people and livestock in the sample area by sub-location	138
Table 5.5. Land use and land available for people and livestock in the sample area by holding size	138
Table 5.6. Average yields per ha. (90 kg bags) and standard deviation by holding size and by sub-location in the sample	152
Table 5.7. Maize exports from Nandi district, 1930-1939	154
Table 5.8. Marketed output of maize, Nandi district 1940-1952	154
Table 5.9. Land distribution in Nandi district (1960 survey)	157
Table 5.10. Area under hybrid and local maize (ha.) in Nandi district 1971-1987, estimated total maize yield purchases by NCPB (kg) and reported fertilizer use	161
Table 5.11. The expansion of marketed milk, 1972-1987)	162
Table 5.12. Development of livestock in Nandi district	163
Table 5.13. Green tea leaf production 1975-1987 (kg), smallholder tea area and number of smallholders	164
Table 5.14. Development of beans production in Nandi district	165
Table 6.1. Size distribution of land in the sub-locations in the sample	172
Table 6.2. Mean wage-labour ratio and percentage of households not hiring wage-labour, by holding size	174
Table 6.3 Variation in the labour process of maize growing in the sample area.	176
Table 6.4. Average labour input per farming task in the sample	177

Table 6.5. The degree of participation of households in production and sale of agricultural produce (in % of households) by sub-location	180
Table 6.6. Adoption of HYV-seeds and associated package of biochemical inputs	181
Table 6.7. Mean degrees of commoditization and participation in maize and milk sales in Nandi by holding size	183
Table 6.8. Secondary occupation of head of household in the sample (N=90) and mean income from agriculture and off-farm work or enterprise (Ksh)	185
Table 6.9. Share of wage labour of total labour input by secondary occupation	187
Table 6.10. Mean income by income group in the sample, in Ksh	187
Table 6.11. Classes and strata in Nandi District (%)	194
Table 6.12. Share of peasant strata of sales of maize and milk and gross revenue	195
Table 6.13. Average possessions of land and implements by peasant strata in the sample	195
Table 6.14. Degree of commoditization of maize production and of maize consumption	196
Table 6.15. Average income per peasant stratum and share in total income	196
Table 6.16. Frequency of jembe replacement	197
Table 6.17. Correlation coefficients for the variables in the regression equations	199
Table 7.1. Percentage smallholders growing local and hybrid maize varieties, 1974/75	211
Table 7.2. Maize planted with hybrid seed as a proportion of total maize area, by province, 1981/82	211
Table A.1. Number of plots according to holding sizes in six selected sub-locations (%)	284
Table A.2. Distribution of plots after sampling	284
Table A.3. Distribution of plots after survey	286

List of Figures

Figure 3.1. State intervention in agriculture in Kenya	80
Figure 4.1. Export commodity production on estates and by smallholders, 1959 - 1988	106
Figure 4.2. Tea cultivated area by type of producer and number of smallholder producers	107
Figure 4.3. Agricultural input indices, 1972-1988	110
Figure 4.4. Smallholder marketed production by Province, 1945 - 1962	115
Figure 6.1. The Lorentz curve for distribution of land in Nandi district	173
Figure 6.2. Farming intensity per type of labour process	178
Figure 6.3. Farming intensity per type of labour process	179
Figure 6.4. Mean farming intensity by secondary occupation in maize farming	186
Figure 6.5. Lorentz curve for the distribution of income	188

Figure 6.6. Farming intensity by peasant stratum in maize (measured in total labour days/ha.)	197
Figure 6.7. Path-diagram for maize production in Nandi district	200
Figure 7.1. Hybrid maize area and sales by KSC	210
Figure 7.2. Marketed maize and maize imports, 1962 - 1988	213
Figure 7.3. Area under maize in the large farm sector, 1959 - 1987	218
Figure 7.4. Deflated export producer prices, 1964 - 1987	220
Figure 7.5. Marketed milk and dry milk imports, 1974 - 1988	222
Figure 7.6. Deflated maize and milk producer prices and the milk-maize exchange rate, 1964-1987	223
Figure 7.7. Agricultural terms of trade, 1976 - 1988	224

List of Maps

Map 1. Provinces and districts of Kenya	40
Map 2. Nandi district	135
Map 3. The Nandi Reserve - 1923	146

CHAPTER 1: TOWARDS A THEORETICAL FRAMEWORK FOR THE ANALYSIS OF AGRARIAN CHANGE

Introduction and presuppositions

The research theme of the thesis - agrarian change - was delineated by the following recognition: the agricultural sector as a whole, together with the farm enterprise and the agricultural population, is increasingly embedded in an extended network of economic, political and cultural relations evolving between various institutions and enterprises, markets as well as between sectors of the economy. The state, or rather state institutions, the farm enterprise and the household living and working on it, are considered as agencies of change playing an enormously important role in the establishment of this highly interlinked system. The historical, and often discontinuous, processes elementary for the understanding of the nature of the evolving relations between the farm enterprise, the agricultural population and the wider economic and institutional environment have been recognized as commoditization, institutionalization and intervention.

Two major presuppositions inspired the search for an adequate analytical framework and influenced the above formulated starting point. Both are to the forefront in theoretical and empirical research by several scholars and in various strands of development theory. The first is the necessity to start from the paradigm of the incorporation of agricultural production, the agricultural population, and countries and regions into the broader world-wide political, economic and cultural environment. The underlying rationale behind incorporation processes has been ascribed to the expansion of capitalism on a world scale gradually encapsulating the Third World countries in the international capitalist division of labour. This process has been carefully examined by a.o. Lenin (1917) and more recently by Jalée (1968), Frank (1971), Magdoff et al. (1972) and Amin (1973).¹ Amin (1972), Berry (1984), Cooper (1981), Bernstein (1979), Mabogunje (1980) and Onimode (1988) analyzed this in the African context. There is no need to summarize in detail their findings here. The acceptance of this presupposition means that agrarian change cannot be understood without envisaging incorporation and the processes set in motion by incorporation: commoditization and institutionalization. These concepts shall be defined later on.

The second presupposition arises out of experience with incorporation processes. A conscientious examination of the processes of incorporation indicates that these are historically specific and discontinuous. In addition it became clear that incorporation resulted in regionally and socially differentiated development patterns.² Incorporation processes do not proceed according to universally operating laws of motion and do not follow pre-determined linear patterns of development.

The implications of this particular presupposition are manifold. A considerable scope for variation in development patterns must be built into the

analytical framework. This is notably relevant for understanding the heterogeneity of agriculture and the vitality of various operational units in the agricultural sector such as plantations, large- and small-scale production units, various styles of farming, and capitalist farm enterprises and family farms. This requires the adoption of an approach beyond the 'logic of capital' framework of analysis in which capital is conceded as an active actor subsuming other different actors under general economic 'laws'. Simultaneously, an approach is needed which goes beyond interpretations which reduce development patterns to specific 'economic-corporate' struggles among various factions and classes.³ We must encompass other 'laws' and levels as well, such as political and cultural 'laws', the life-world of the peasantry and the ways in which the agents who are part of the process of development interpret and manage their life-worlds.

Long (1977, 1984b, 1988, 1989) in particular calls for an actor-oriented approach to incorporate these aspects. Essential to this approach is a politico-economic analysis which focuses upon showing how socio-economic developments and patterns of social organization are structured by the larger framework of economic and power relations, including the ways in which the state attempts to manage development. It focuses on the perceptions and strategies unfolded by those staffing the state apparatuses, farmers, industrial entrepreneurs, traders and bankers acting collectively through various interest groups, organizations and networks. Such an analysis also pays attention to social and ideological mechanisms by which particular economic systems and forms of production are reproduced. Such a framework avoids reducing the farming population to powerless subjects, to puppets on a string held tight by capital and the state. In addition, sectors of the state bureaucracy are not viewed as passive representatives of an ensemble of institutions mandated to carry out various tasks solely to facilitate capitalist expansion. Structural, social, political and economic developments - such as changing market and international economic conditions, shifts in the power base of the state, crisis in the legitimacy of the state vis-à-vis the peasantry and international development ideology - effectuate and lead to changes in state policy and socio-economic development patterns. Moreover, intervention, commoditization and institutionalization are not disembodied processes. 'From an actor perspective, commoditization and institutionalization only become real in their consequences when introduced and translated by specific actors'.⁴

Long (1989) perceives social actors as 'knowledgeable' and 'capable'. Actors attempt, according to Long, 'to solve problems, learn how to intervene in the flow of social events around them, and monitor continuously their actions, observing how others react to their behaviour and taking note of various contingent circumstances'.⁵ They exercise some kind of 'power', even those in subordinate positions. In these ways they actively engage in the construction of their own social worlds, although the circumstances they encounter are not merely of their own choosing. The embedding in a wider economic, political and cultural institutional framework, or the structural location in society, certainly constrains social behaviour. Decisions and actions of actors, may, according to Hindess (1986b), 'well be affected by what happens elsewhere, but it does not follow that they are determined'⁶, and thus not simply

reducible to the expression of the actor's position within a system of social relations.

In addition to that, both Long and Hindess point out that the reaching of decisions entails the deployment of some 'discursive means' whereby objectives, arguments and analysis are formulated for the decisions taken. Long stresses therefore that

'all societies contain within them a repertoire of different life styles, cultural forms and rationalities which members utilize in their search for order and meaning, and which they themselves play a part in affirming or transforming. Hence the strategies and cultural constructions employed by individuals do not arise out of the blue but are drawn from a stock of available discourses (verbal and non-verbal) that are to some degree shared with other individuals, contemporaries and even predecessors. It is at this point that the individual is, as it were, transmuted metaphorically into the social actor, thus signifying that 'actor' is a social construction rather than simply a synonym for the individual person or human being.'⁷

This delineation of actor goes thus beyond the notion that actors are simply reducible to human individuals and/or to their structural location in society. Hindess (1986b) argues convincingly that human individuals are actors, but they are not the only entities that reach decisions and act accordingly. Capitalist enterprises, state agencies, political parties, church organizations, farmer organizations and unions are examples of social actors; they all have means of reaching and formulating decisions.⁸ In other words, social classes, capital, peasantry, society and state are not to be treated as actors. Accordingly, as Hindess (1986a) takes the argument a step further, interests upon which actors supposedly act are not necessarily given by their social location, although, he recognizes several aspects by which they may be connected with actors' location in sets of social relations. The connections are to do with the discursive means available to the actors, the differential access to means of action by organizations supporting actors in their assessment of interests and the differential impact of social conditions on actors and changes in such conditions.⁹

It is obvious that the notion of actor does not exclude a differential degree of access to power on the part of the different actors. Simultaneously, decisions of one actor involve reactions from several other actors, and conflicts emerge between actors when one of them makes a decision and acts accordingly. This is particularly evident when the social conditions of certain actors are affected by decisions of other key actors. Massive evasion of tax and/or crop regulations by peasants during the colonial period in Africa, reactions of peasants or peasant organizations to certain price regulations of a state institution and workers' strikes resulting from a reorganization of an enterprise evoked by the board of directors are examples of these kinds of actions.

Peasants have been analyzed in a variety of ways, as active agents of change ('revolutionary') and as powerless ('conservative') actors. In various historical settings peasants may indeed be viewed as powerless, being subject to a ruling elite or to war lords trying to establish their political power. Marx's (1962) analysis, which is perhaps his most frequently quoted work in relation

to agrarian change, *The Eighteenth Brumaire* of the French peasantry during Bonaparte's rule, established this clearly. Marx, at any rate, describes next to the conservative peasant also the peasant who is engaged in struggles to overthrow the old order. The famous 'potato-bag' image, which Marx expressed in the *Eighteenth Brumaire*, has gone a long way, however, and has strengthened the idea that Marx was anti-peasant and that peasants are powerless and intrinsically reactionary. Only under specific conditions, such as the Mexican and Bolivian Revolution, during the Mau Mau rebellion in Kenya, the Maji Maji rising in Tanzania, are peasants regarded as powerful social forces capable of demanding reforms which affected state policy, despite that they were eventually calmed down and lost impetus and impact while different social forces took over.¹⁰

This perspective is one way of analyzing peasants. A different perspective is to view peasants from the notion of actor discussed above. Peasants as actors refers also to the day-to-day negotiations to maintain control over their own means of existence and struggles of peasants to obtain favourable preconditions for agricultural production and welfare. Huizer (1972), Huizer & Manheim (1979), Scott (1985), Mamdani (1987), Long (1989) and Van der Ploeg (1990) clearly demonstrated the 'view from below' and the capability of peasants to carry out their projects according to their outlooks. They are, as such, not powerless. Long (1986) points out that:

'the market and other 'external' forces enter the life-worlds of peasant households, opening up or restricting economic choice, but such new factors are, as it were, processed by the peasants themselves. That is they integrate them into their own farming strategies, and in this sense they retain a degree of independent decision-making. (Accordingly it still is the farmer who) continues to control how they organize their own labour and how they draw upon various non-commoditized factors of production'.¹¹

A second major implication is that the classic and neo-Marxist contributions to the debate on agrarian change become increasingly less relevant. This is not to deny the paramount importance of the Agrarian Question, nor that capitalism has brought a series of mechanical, chemical and biological innovations, nor that future social, economic and cultural developments in the countryside do not depend on the manner in which capitalists try to resolve the problems inherent in agrarian development.¹²

Instead, the intention here is to argue that the classical Marxist formulation of the agrarian question - which is framed in terms of explaining the survival of family farms and how capital is taking hold of agriculture¹³ - needs revision. The history of agricultural development in many countries and regions has established that form of production other than capitalist production exist. Marx after all indicated in *Capital*, Volume III, that agriculture 'needs either the hand of the small farmer living by his own labour or the control of associated producers.'¹⁴ In the same volume he clearly draws attention to the heterogeneity of production processes and co-existence of several labour processes. Within the historical, specific context of England, he distinguishes between labour processes linked to specific commodity circuits and those founded upon a complete circulation of commodities. The originally question as to whether the family farm (or petty commodity production) will

disappear within the capitalist economic system, based upon the view that gradually all production will be capitalist production, becomes therefore irrelevant. In other words, 'capital' is apparently not able to solve the Agrarian Question according to the logic of the law of value. A more relevant and more meaningful question is under *what* concrete conditions of production and reproduction petty commodity production exists under capitalism and *how* these conditions are established and reshaped during processes of intervention, commoditization and institutionalization in the past and in the present.¹⁵

In line with both presuppositions, we propose to analyze processes of agrarian change in the context of what we have learned to understand as an *agrarian structure*. However, before giving a definition of an agrarian structure, we shall clarify in the following sections the three central concepts commoditization, institutionalization and intervention which are considered to be essential for its understanding. In section 3 we will delineate the concept of agrarian structure and its properties. In the following two sections, we shall set the focus of the study and present an outline of the thesis.

1.1. Commoditization, institutionalization and intervention

A retrospective view on the course of the process of incorporation reveals that changes have occurred in the agricultural sector. On the one hand we witness the transformation of relatively autonomous and self-sufficient production often in combination with a modest surplus for regional trade, to production oriented towards 'unknown', often distant, markets. The rural economy gradually commences to realize regular surpluses out of agriculture on the basis of which growth outside agriculture takes place, in rurally based industries and commerce. Rural populations increasingly become both producers of commodities for the market and consumers of industrial or otherwise manufactured production and consumption goods.¹⁶ An intensification of rural labour and/or industrial developments and technological (mechanical, chemical and biological) innovations contribute to an increase in productivity in agricultural production systems. Simultaneously, as production becomes more integrated into markets and the innovations are integrated into agricultural production processes, profound changes take place in the various agricultural labour processes.

In such aggregate and abstract reasonings we have to realize, however, that these processes are neither completed, nor commenced at the same time. Rural producers remain, for instance, producers of consumption goods to satisfy the needs of the household outside the realm of the market. Simultaneously they reproduce various farm inputs to a certain degree during agricultural production. The degree of incorporation of various regions and peoples in the market economy differs significantly in time, impact and intensity by country, regions and continent as well as by producers.¹⁷

Generally, the start of the above transformation processes in Africa is traced back to the establishment of colonial rule. This is signified by the gradual building of a colonial state apparatus and the entrance of productive, finance and merchant companies and institutions. This process started roughly at the end of the 19th century. From that particular point in time Africa is considered as having become integrated into the international capitalist division of labour.

The pre-colonial (or pre-capitalist) social formations in Africa are generally portrayed as societies where production of *use-value* is the predominant pattern of development. This view neglects, however, two important features of pre-colonial Africa. Destruction and disintegration in Africa had begun long before colonization was effectuated (slave trade, simple collection of natural products, coerced labour and plunder).¹⁸ Furthermore, in pre-colonial Africa, exchange relations, periodic markets and socio-economic differences between people were not totally absent.¹⁹ There was some degree of commodity production, and regional specific patterns of development emerged which gave rise to inter- and intra-regional and continental trade relations. What is stressed here is merely that the necessary social, economic and spatial conditions for an expansion of commodity production to satisfy the demands of Europe's colonial powers and industrial enterprises for raw materials and import/export trade opportunities, hardly existed or did not exist at all. These conditions had to be created in the colonial and other territories of Africa.²⁰ Here we want to start our analysis.

Two highly correlated and interacting, though not necessarily simultaneously operating, development processes are taking place in the agricultural and other sectors of the economy: *commodification* and *institutionalization*. A synthesis of both concepts in its turn leads towards the notion of intervention in the conditions for agricultural production.

1.1.1. Commoditization

In the following, we shall first clarify the process of commoditization. Commoditization denotes according to Long (1986) 'the historical process by which exchange value comes to assume an increasingly important role in economies'.²¹ Commoditization of production in agriculture and other sectors of the economy implies the expansion of commodity production and exchange relations, and, at the same time that the conditions of production in agriculture and of reproduction of farm enterprises and the household working on the farm are becoming increasingly ruled by the logic of the market. The concept of commoditization encapsulates thus *commercialization* and *capitalization* of production.²² Commercialization is understood here as the process by which production is increasingly oriented toward the market in exchange for money. Capitalization refers to the process whereby production factors increasingly appear as exchange value in production processes, on the farms and in the fields. The market gradually comes to serve as a place to purchase means of production (land), labour (wage-labour), material prerequisites for production (objects and implements of labour), capital and services (extension and recommendations). Capitalization involves a transformation of the agricultural labour process which thereby increasingly becomes founded upon exchange value rather than use value. The further exchange relations penetrate the labour process, the more production and reproduction require at least some involvement in commercial agricultural production and/or other cash generating economic activities off the farm by members of a household. Furthermore, capitalization incorporates also the creation of the conditions under which production for surplus value may be realized.

Both notions are useful for a number of reasons. Both are helpful in the delineation of the different periods of commoditization which can be traced in Africa's history. In addition, both notions can be used to examine the process

of institutionalization which accompanies commoditization. Finally, by stipulating the twin processes of commercialization and capitalization we are able to examine the administrative and technological conditions of production in agriculture and how these are created as producers are increasingly incorporated in the market.²³

African history reveals two broad periods.²⁴ One was a time of increasing commercialization of agricultural production. The second period is one of capitalization, which generally commences later than the first.

The gradual commercialization of agricultural production under colonial conditions coincides in many cases with the disintegration of relatively autonomous, self-sufficient production and reproduction cycles of pre-capitalist societies. Production for the market was encouraged as well as enforced by the implementation of a combination of several types of intervention facilitated under colonialism by the colonial state. The means employed by the colonial state are well known and frequently spelled out: (1) imposition of taxes (per hut and head), (2) use of forced labour for the construction of the necessary infrastructure (roads, means of communication), (3) (often violent) recruitment of labour for production enterprises like plantations, farms, ranches and mines organized by white settlers, by international agro-firms or by the state itself, and (4) the imposition of cash crop production on the rural producers which in many occasions coincided with coercion.²⁵ Labour was gradually withdrawn from use-value production (in agriculture, hunting and fishing, animal husbandry, craft activities such as house building, manufacturing of tools, weapons and other artifacts). Other important patterns of development and life-styles of pre-colonial Africa (such as warfare and raiding of cattle and women) had to be abolished under the pressure of military pacification campaigns organized by the colonial state. In several cases, i.e., in the white settler colonies in Eastern and Southern Africa and in the 'Africa of the concession keeping companies', land was simply and forcefully alienated from the Africans. The confiscation of land severely limited the choice of the local population to continue to live and work as independent producers and/or to maintain 'traditional' life-styles.

An important social condition for commodity production by indigenous producers was created: cash income. Access to cash (the so-called hunger for cash) was increasingly viewed as the means to pay taxes and to satisfy other demands which were previously realized outside the realm of the market. The need for cash became an impetus behind some involvement in commodity production. Rural African producers were increasingly drawn into the market economy, *either* through production of cash crops *and/or* through the exchange of their labour power for wages. The alienation of land and the African labour force formed thereby facilitated the creation of conditions conducive to the expansion of commodity production organized by international firms and white settlers. Commodity production in agriculture and commodity relations expanded gradually, in some regions very rapidly, in others only slowly.

The second stage in the process of commoditization in Africa refers to capitalization. With the gradual expansion of commercial agricultural production, productivity increases in the agricultural sector were envisaged in colonial development plans. These objectives were in line with both agro-industrial and merchant interests. Similar to European agriculture, in Third World countries a start was made with the introduction of new technologies in

agriculture Scientific plant and cattle breeding programmes (research on new crops and higher yielding varieties, graded cows, the use of fertilizers and mechanization) created opportunities to enhance productivity of land and labour New improved husbandry practices were encouraged by colonial state officials and subsequently actively integrated by the agricultural population into their labour processes In addition to that, as noted by Bernstein (1979), the colonial state together with agro-industrial and merchant companies combined attempts to regulate what was grown and how it was grown These attempts coincided with the establishment of monopolistic marketing and pricing arrangements ²⁶

These technological improvements created a foundation for a more capital-intensive agriculture In the course of the process of capitalization, the objects of labour (seeds, fertilizers, cattle) and the instruments of labour (hoes being replaced by purchased hoes and tractors) increasingly appear as commodities on the farms and in the fields The factor labour power also becomes increasingly commoditized The employment of wage labour is now an indispensable phenomenon in African agriculture

This short overview of commoditization would be seriously flawed if we did not pay attention to acts of peasants resisting commoditization African history - and particularly colonial history - shows several cases of peasant resistance which became manifest in a number of ways Resistance ranged from refusal to adopt new technologies and husbandry practices to sabotage, from peasant 'strikes' involving refusal to grow certain crops to a withdrawal, at least partial, from commodity exchange, from the evasion of crop regulations to evasion of terms of exchange (by smuggling) and political actions against the state and the state bureaucracy ²⁷ Peasant strikes and other forms of resistance were, however, mainly directed against the specific nature of colonization and not against commoditization Resistance to colonization involved a number of actions directed against attempts by the colonial state to alienate land, to levy taxes and to abolish previous life-styles and production systems. These acts of resistance are not necessarily equal to 'resistance to change' ²⁸ and can therefore also be interpreted as demands to make way for an integration into the commodity economy under favourable conditions The struggle for good prices for their products, the demand for the right to commercialize production and the refusal to grow cash-crops interfering with food production can be mentioned as examples Kenya's history, where the African farmers demanded the right to commercialize agricultural production, is very illuminating in this respect

1.1.2. Institutionalization

Institutionalization is a historical process of an evolving social division of labour and specialization between the agricultural sector and the industrial, service and commerce sectors of the economy as well as between producers and productive units During this process various actors establish themselves in that division of labour and accordingly perform specific roles The actors may include farmers, traders, marketing organizations, farmer organizations and cooperatives, extension services, banks, agribusiness enterprises, input suppliers and various state apparatuses The set of relations that binds them forms what Benvenuti (1975, 1982, 1985) has labelled as the technico-

administrative task-environment for farming (TATE) TATE may be considered as the structural environment of social interaction in agriculture ²⁹

TATE is a strategic concept for the analysis of how and under what conditions farm enterprises become integrated into a wider environment and network of relations between the various actors TATE discloses specific aspects of both commoditization and institutionalization Seen in historical perspective, the systematic network in which farm enterprises and rural households earning a living from it, become gradually embedded, is getting more complex The notion of complexity discloses two crucial aspects

In the first place, there is an increase in the number of 'external' actors The expanding production for the market coincides with the building up of an administrative and marketing structure In the African setting, this institutional structure consists of state owned marketing boards, producer marketing cooperatives and private trading companies as well as transport enterprises, banks, processing industries and retail and wholesale distribution networks The above-named technico-administrative environment for agriculture is resulting from the establishment of specialized research stations, input producing industries and/or companies importing these inputs as well as a network of distributors and local traders

In the African context, it is crucial to note that the historical development of TATE involves state administrative and political control as well as capital investment by the state The terms of exchange for majority of the agricultural commodities and production inputs are fixed by the state The technological foundation upon which capitalization could proceed was not achieved by individual farmers but by the public sector It was already emphasized earlier that this coincided with attempts by the state to regulate and supervise production

In addition to that, one of earliest functions of the colonial state was to plan and to build up a physical infrastructure consisting of roads, railway lines and communications networks to facilitate the expansion of commodity production The historical development of TATE coincided thus with the building of state apparatuses mandated with various legislative powers and equipped with various instrumentalities The realization of TATE may be regarded as an essential function of the state This requires some notion of the state and a delineation of state functions to which we shall return later on in this chapter

Of particular relevance is the fact that besides the local state, multilateral and bilateral aid institutions play a crucial role in the realization of TATE It is clear that the local state experiences shortages of investment funds as well as lacking technical and managerial expertise to facilitate the further development of TATE and the relations it embodies This particular situation forces the state to call upon various international agencies for development assistance and/or to accept foreign aid

Generally, foreign aid from multilateral (World Bank, FAO) and bilateral sources moved into projects such as rural integrated development schemes which provide for the development of commodity relations and into the direct planning and financing of production schemes, agricultural R&D and dissemination of research results, import and balance of payments support ³⁰ In addition to foreign aid relations, the state maintains commercial ties with private consultants bureaus and agribusiness companies These companies

frequently offer ready made technological and managerial solutions (the so-called turn-key projects, contract farming arrangements and input package deals) for the problems which the agricultural sector faces

In the second place, the notion of complexity reflects a condensation of the network as a gradual intensification of the relations between the farm enterprises and the external institutions takes place Empirically, this is mirrored in the tendency for farm tasks, which at earlier conjunctures were regarded as integral elements of the rural production process, to be reallocated to external agencies Seed, fodder and manure production, processing, marketing and distribution is increasingly organized in other sectors than agriculture

The consequence of the reallocation of farm tasks has also been labelled as externalization³¹ Externalization is at the same time the foundation for commoditization and institutionalization for a continuing integration of agriculture and industry, for a division of labour between agriculture and industry as well as between productive units within the agricultural sector itself The more the farming population reallocates farm tasks, the more the coordination of these tasks is now constituted through TATE-relations and through commodity relations³² Benvenuth (1975, 1982, 1985) and Van der Ploeg (1985, 1986, 1987, 1990) stress that the different agricultural labour processes which can be distinguished in agriculture, become increasingly determined and prescribed in harmony with and as a function of TATE Farm labour is increasingly becoming responsive to external stimuli, restraining the choices and independence of the farmer and conditioning the process of reproduction In this respect, commoditization and institutionalization involve control over farm labour by external agents

1.1.3. Intervention

A good example of how commoditization and institutionalization fuse into the concept of intervention is provided by the Green Revolution In our explanation we lay particular emphasis on the replacement of local maize cultivars by higher yielding, hybrid maize varieties

The Green Revolution can be considered as a world-wide strategy aiming to increase food production and alleviate poverty in the rural areas in the developing countries Various actors took part in outlining the strategy In the beginning it involved primarily bankers and industrialists, who were later followed by international organizations (World Bank, FAO) and private research institutions³³ These institutions, as well as a large number of scientists³⁴, were convinced that Third World agriculture lacked productive factors of production and adequate skills to exploit them Therefore, they called for an action programme aiming at a major transformation of traditional agricultural production systems In close cooperation with agribusiness companies, much effort was put into agronomic research on new and high yielding cultivars, seed testing and seed certification Given the tremendous variability of ecological conditions the best strategy appeared to be to

'develop a fairly standardized package of seeds and other inputs that would be relatively insensitive to soil and climate variation while still giving good results' The package that did result includes the Hyvs only as the most dramatic and visible element Other necessary parts of the

package are precisely those that are associated with industrial agriculture irrigation, fertilizers, pesticides, increased mechanization and a complex support and marketing system' ³⁵

In addition, the need to combine all this with the provision of extension services and credit to the farming population to secure adoption of innovations was emphasized. Common to all the practices and ideas of these institutions was the notion that these new technologies, and particularly the new grain/fertilizer technologies, were highly divisible and scale-neutral. This feature would allow them to be integrated into existing systems of small-scale agriculture. In the second place, proponents were strongly convinced that it provided productive employment for the rapidly growing rural labour force. Simultaneously, it could produce wage goods needed for an expanding industrial labour force ³⁶

The implementation of the Green Revolution strategy required a radical reorientation and revision of the technological and institutional environment for farming in the developing world. It required a condensation of relations between the agricultural population and the institutional environment. A major outcome is that, increasingly, the breeding of 'traditional' maize varieties as well as 'traditional' selection and distribution systems are disappearing - here slowly, there rapidly. These systems were gradually replaced by 'modern' hybrid maize breeding programmes and sophisticated distribution systems. This transformation process does not only enhance the increasing importance of commodity relations but it strengthens also another process which elaborates on the nature of the linkages between farm enterprises and institutions. 'Give me a laboratory and I'll raise you a world' wrote Latour (1983). He pointed out with this phrase that the results of work in laboratories are transforming society, that is, that science, and particularly agricultural and biochemical science, is playing an important social role in the release of the productive forces in agriculture and in the remodelling of agricultural practices.

Van der Ploeg (1987) calls this the process of 'scientification of agricultural practice' ³⁷. The introduction of new technologies and their integration into farming practices is thus not only accompanied by the development of sophisticated production and distribution systems. Simultaneously we witness the development of a new knowledge system with new agents: scientists instead of farmers. Additionally, it claims superiority over 'traditional' systems. This scientific knowledge system may be considered as the institutional and technological breeding ground of sophisticated plant breeding programmes and associated programmes mentioned earlier. The fact that farming practice and state policy are increasingly oriented towards adoption of these new technologies, implies at the same time that farm practices are progressively modelled by scientific agricultural designs, developed in laboratories and on drawing boards by scientists. This will be highlighted briefly by the following.

Hybrid maize is introduced by reason of its higher yields compared with traditional varieties. An important feature of hybrid maize is that, in order to produce these higher yields, it requires the adoption of bio-chemical inputs (fertilizers and preferably also pesticides). The use of these inputs is more or

less compulsory and prescribed. It is generally accepted that hybrid seeds do not grow well without fertilizers.

A second major characteristic is that multiplication of the seeds can no longer take place on the farm.³⁸ The farmer is compelled to maintain commodity relations in order to obtain seeds and fertilizer. A third important feature of hybrid maize is that it depends on reliable rainfall patterns (particularly where maize growing is rain fed) and relatively good soils. No rain, no good harvest. A major implication hereof is that the correct timing of farm tasks, such as land preparation and particularly of sowing, is needed in order to coincide with specific phases of rainfall. The more accurate the time of planting of hybrid maize and the closer to the technological optimum, the higher will be the yield. Seasonal labour peaks are intensified accordingly.³⁹ Labour peaks and the correct timing of the employment of labour become a major determining factor in agricultural production. More importantly, perhaps, both factors increasingly determine the organization of the labour process.

Contrary to hybrids, traditional or local maize varieties are generally more resistant to drought. They are less subject to time consideration and can be reproduced on the farm. These varieties can be exchanged on a local basis and this will contribute to a maintenance of the genetic resources of a region.

The speed of adoption of HYV maize seeds and the trend for the areas planted with high yielding varieties, fertilizer application and mechanization the increase, demonstrates that the farming population actively integrated these new opportunities into their labour process.⁴⁰ Zimbabwe and Kenya in particular demonstrate that the adoption rate of hybrid varieties by large and small-scale farmers was high and remarkably fast.

The Green Revolution example shows that the drive behind processes of commoditization and institutionalization can be delineated as the motivation of various actors to create infrastructural conditions for agricultural (commodity) production by which productivity of land and labour could be enhanced. The leading think-tank among the development institutions, the World Bank, clearly considers both aspects as the vehicle of development. The explosion of population growth in Africa (approx. 3 % a year), together with the low and backward technological and managerial development level of the agricultural sector, can be held accountable for the general persistence of poverty, decreasing productivity, non-sustainable growth and the absolute decline in per capita food production.⁴¹

Modern production-, marketing- and other post-harvest technologies, the use of higher yielding improved crop varieties, fertilizers, pesticides and the application of irrigation have to become general property of the agricultural sector. Agricultural development schemes, project planning, foreign aid, a proper agricultural extension service and agricultural R&D programmes, and the right incentives to producers have to accompany and synchronize these innovations.⁴² If these objectives, to use Trigo's (1986) words, are put in 'the optimal format, the job gets done.'⁴³ New attitudes towards management, and changes in policy and development planning, are viewed by the World Bank as the necessary development instruments for a successful transformation of the agricultural sector. This would benefit the economy as a whole and the people who work and live in agriculture - and who will eventually leave it.⁴⁴

Institutionalization of these tasks together with monetization of the economy are viewed as among the most essential vehicles of economic growth. The technologies and husbandry methods to raise agricultural production are available - experiences in other parts of the world have after all demonstrated, in the eyes of the proponents of the Green Revolution, the viability of these new technologies - but the institutional format as well as the 'prices are not right' 45 If these conditions are fulfilled, a 'take-off' for an 'accelerated growth' will be accomplished. The 'trickle-down-effect', which is assumed to be operating automatically, will assure that the fruits of modernization will percolate to all strata of peasant society and even to the lower strata 46

The Green Revolution strategy demonstrated that such a development outline for the agricultural sector requires the development of a solid TATE and, simultaneously, an expansion of commodity relations in the agricultural economy. Agro-industries and related agro-institutions function as the generators of the process of commoditization, that is, agricultural modernization 47 The rural population in this view simply has to adopt and integrate innovations and modern inputs into the agricultural production process. Theoretically, these development outlines are rooted in modernization theory of 'induced' innovation for technical and institutional change in agriculture. In other words, 'external' intervention in the conditions of agricultural production is emphasized as crucial and legitimate to trigger off the development process 48

Intervention in agriculture is understood in this book as the process by which various actors according to their perspectives (knowledge, norms and values) and opportunities (capabilities) attempt to create the preconditions for agricultural production and socio-economic growth. Intervention, as a strategy to approximate to the specific development model, contains, thus, various non- and/or extra-economic conditions and outlines the general approach appropriate for its realization 49 It involves, as recalled earlier, intra-society relationships existing among individuals, groups, organizations and institutions. The various actors have various strategies to intervene and operate from different power positions. Therefore, intervention also involves power differentials between actors, and negotiations and representation. Intervention embraces thus a continuing political, economic and ideological struggle about the conditions of production. However, intervention is not necessarily planned with intended outcomes. Intervention can also be unplanned with unintended effects on social change.

Planned intervention by the state takes the form of a social policy which may be defined as a plan, a guide-line or principle complete with the institutions mandated with legislative and executive powers for a course of action. Programmes and projects are both operationalizations of particular policies. Programme refers to actual implementation of a policy across various sites and perhaps times, i.e., such as the Green Revolution. Projects on the other hand refer to the actual implementation of a policy in a single time and setting, i.e., such as foreign aid sponsored integrated rural development projects 50 Policies, programmes and projects are all forms of social intervention 51 In this respect, we can interpret state agricultural policy as a specific form of planned intervention.

1.2. The outcome of intervention in agriculture in Africa: competing views and cures

Numerous external interventions in agriculture have taken place in Africa, particularly since the beginning of the sixties when most of the African countries gained independence. These interventions comprise policies, programmes and projects implemented and financed by various agencies, the state and multilateral and bilateral aid institutions.

Despite the numerous efforts, rural poverty still persists in Africa. Levels of income in the countryside are still low, in some countries even lower than 20 or 30 years ago. Rural households cannot make a livelihood from agricultural production alone, and the prices and the institutional formats are (still) not adequate.⁵² In addition, 'redistribution with growth' is not accomplished as income and land are unequally distributed among the agricultural population, and socio-economic inequalities between regions are increasing.⁵³ Food production is still insufficient, necessitating food imports to feed the nation. Increases in agricultural production lag behind population growth. Productivity in agriculture is generally viewed as low, although it varies enormously between countries and regions as well as between various crops.⁵⁴ The latter may imply that some progress has been made. It may also imply that, at the same time, some distortions and frictions have emerged during intervention or are reproduced through intervention. Several options and competing views are brought forward in development literature.

The critics of the Green Revolution strategy hold, for instance, the view that planned intervention was essentially 'a betting-on-the-strong' policy and that it was the agribusiness companies, capitalist farmers, the rich peasantry and sections of the landlord class who have benefitted.⁵⁵ They strongly question the scale neutrality of new technologies as argued by its proponents.⁵⁶

Various other studies, such as undertaken by several UNRISD research teams, revealed that developments set in motion by intervention, commoditization and institutionalization created at the same time both food security and food insecurity. Some sections of the population gained substantially during the course of development, while others were left out in the cold.⁵⁷ Whether this is part of a planned strategy or an element of a unforeseen and unwanted process remains a critical issue.

Others claim progress has not, or has only partly been achieved because the farming population is resisting commoditization while local farming systems are considered as ineffective. Ignorance, lack of adequate skills and traditional attitudes towards land and cattle constrain development. The state is frequently accused of being ineffective in the fulfilment of its tasks.

It is, furthermore, claimed that the impact of foreign assistance on agricultural production is probably small and possibly counterproductive. To make matters even worse, coordination amongst the various donor initiatives in agriculture and related sectors proved to be difficult, while the influence of such agencies on policy development has only been significant in the last 10-15 years.⁵⁸

Again, others claim that frictions occurred because capital penetrated the African pre-capitalist social formation - an historical process whereby the capitalist mode of production articulated with non-capitalist 'modes of production'. The latter have been transformed and conserved at a certain stage in which 'they' facilitate for capitalist accumulation. Small-scale peasant

production serves as a cheap labour reservoir and a producer of cheap wage-goods. In this view, as long as the capitalist mode of production is dominant in Africa, development and major socio-economic transformation will not occur and surpluses continue to be siphoned off to the centres of the capitalist world system.⁵⁹

Orthodox Marxists claim more or less the opposite: that is that capitalism did not penetrate far enough into the agricultural sector and that it is, therefore, unable to complete its historical tasks.⁶⁰ Chambers (1983) and Richards (1985) have put forward the thesis that as long as local knowledge and skills are not part and parcel of intervention packages, development remains stilted and will proceed only slowly. Furthermore, recently-expressed environmental concern about land degradation and genetic erosion raises questions about the sustainability of contemporary development trajectories.⁶¹

When all of these views are taken into consideration, it appears that the reality of intervention and of the materializing relations between the so-called intervening parties (agro-industrial enterprises, merchants, the state apparatus and various other organizations) and the target or recipient groups (peasants) is more complicated, problematic, diversified and dynamic. This statement contains various issues and raises several questions which are related to the nature of intervention, commoditization and institutionalization.

An examination of the reality of and the problems related to intervention, commoditization and institutionalization requires an adequate level of analysis. Following Godelier (1978) and Long & Roberts (1984) we suggest to analyse these process in the context of an agrarian structure.

1.3. Agrarian structure and heterogeneity

Godelier (1978) defined structure as shaped by a specific combination of at least three series of social and material conditions that enable a agrarian society and members of that society to produce and reproduce the material conditions of their social existence. These sets are a specific combination of ecological conditions, the productive forces in agriculture and social relations of production.⁶² Long & Roberts (1984) operationalized a similar agrarian structure. They understand it as a 'regionalized system of production' composed of various forms of production supported by a complex inter-linked and dynamic system of technico-administrative institutions, existing natural resources and other production factors as well as the relations between various economic sectors, the legal and political institutions and the social classes and categories (traders, state officials, ethnic groups and the various peasant strata) present in the region.⁶³ Long & Roberts' socio-spatial and methodological delineation clearly mirrors that an agrarian structure is shaped by processes of commoditization, institutionalization and (planned and unplanned) intervention as well as shaped by the struggles of actors.

An essential ingredient for the understanding of an agrarian structure is heterogeneity. Both definitions accentuate that quite clearly. An adequate notion of heterogeneity is, in addition, crucially important for the understanding of the regionally specific impact of commoditization, institutionalization and intervention.

Heterogeneity in agriculture does not represent a coincidental phenomena, nor a temporary aspect of development. It is a feature which is frequently misconstrued by policy makers. Heterogeneity is generated by three structural

complexes which are constantly being reproduced through intervention and through processes of institutionalization and commoditization. All three complexes shall be examined below.

1.3.1. Heterogeneity is inherent in agriculture

The first dimension of along which heterogeneity emerges is that the labour process in agriculture is locally specific and conditioned by ecological circumstances. Lacroix (1981) argued that even within the boundaries set by ecological circumstances and by externally and internally conditioned relations, heterogeneity in agriculture is based on the specific organization of the agricultural labour process. Every agricultural system has its own 'l'art de la localite' according to Mendras (1970). 'L'art de la localite' signifies that production in agriculture originally involves artisanal and diversified knowledge. Farmers are viewed in this sense as 'knowledgeable' and 'capable' actors. In and through farm labour, knowledge is constantly produced and reproduced, transformed, exchanged and enriched through mutual communication. 'L'art de la localite' often contains an extremely detailed knowledge of the exploitation of local natural resources. In addition, 'l'art de la localite' is an intrinsic element of local cultural domains and identities.⁶⁴ Heterogeneity must, therefore, be viewed as a property of an agrarian structure. It is being produced and, at the same time, reproduced, though it takes different forms (see section 1.3.2.). Heterogeneity does not 'emerge as something casual but rather as an outcome of development being designed and realized from "below" and within the local setting.'⁶⁵

From an analytical perspective the specific local body of knowledge forms at the same time one of the essential mechanisms through which the direct producers retain control over and manage their production process. An understanding of 'l'art de la localite' is thus essential for the party who decides for whatever reason to intervene, whether it is the state, non-governmental organizations, or foreign aid institutions.

1.3.2. Differential degrees of commoditization

A second dimension of heterogeneity can be traced to the fact that in agricultural labour processes are not just a simple function of market relations and terms of exchange. Farm labour involves more than just market relations. Chayanov (1966), for instance, recognized this clearly in the Russian countryside during the first part of this century. Within agricultural production, it is still possible to choose to obtain the basic elements of the labour process (labour, objects and instruments of labour) and the means of consumption, through production and reproduction on the farm, i.e., outside the sphere of the market, or to obtain (some of) the elements through market relations. In the first case they appear as use-value in the production and reproduction process. In the second case, they appear as exchange-value, as commodities. Reproduction of the farm enterprise and the peasant household is thus founded neither upon a complete circulation of commodities nor on a systematic relation with the labour market. Expressed metaphorically, peasants stand with one leg in a network of commodity relations and with the other in a network of non-commodity relations.

Every productive unit in agriculture, whether it is the family farm or a large-scale farm, is supported by a strategic balance: a certain relation between

exchange-value and use-value a balance between the logic of market relations and a cultural, socio-political ratio reassured by non-commodity circuits of exchange and production. The connotation 'degrees of commoditization' is one way to express. The degree of commoditization reflects the extent to which production and farming strategies are oriented towards the market. It 'can be measured in terms of the proportion of resources mobilized through the market as against the total of these resources applied on the farm' ⁶⁶

The maintenance of the strategic commodity - non-commodity balance, a crucial element in a *farming strategy*, is strategic in two respects. It is part of a defence line in household or peasant economies vis-à-vis capital and the state. Simultaneously it is part of the strategy of the agricultural population to arrange and regulate production and reproduction and their relations to the market according to their interests, opportunities and perceptions. Chayanov (1966) for instance emphasizes the strategic and precarious balance between labour and consumers within a farm enterprise as a major regulatory device for household production.

Farming strategies are, however, not only based on agricultural production. Various researchers stress the tendency for rural producers to rely increasingly on off-farm income. Cowen (1983, 1986) defines this as 'straddling'. It denotes a certain combination of involvement in agricultural commodity production and non-agricultural activities, although the rationale and the social meaning of straddling differs among rural producers. For the poor peasant households, it is a crucial element in their strategy to protect the means of consumption. For others, notably the capitalist farmers and rich peasants, involvement in non-farm activities is an essential ingredient of their entrepreneurial strategy to diversify their economic base. ⁶⁷ Straddling, as a significant property of an emerging agrarian structure, reveals the nature of and different effect of commoditization, institutionalization and intervention on agricultural development patterns. It involves different relations between the agricultural sector and other sectors of the economy as well as between productive units within the agricultural sector. In the case of poor households straddling means the transfer of money from other sectors of the economy to the agricultural sector. This indicates that developments set in motion by intervention and commoditization appear at least for a proportion of the agricultural population as unproductive. In the case of capitalist farmers and rich peasants, straddling agricultural production and non-farm economic activities encompasses the transfer of capital in either direction.

Long (1984, 1986) stresses that in addition to straddling, farming or livelihood strategies contain a wide range of other possibilities:

'although integration into markets and external institutional structures may reduce the range of economic alternatives available to the farmers, the availability of non-wage household/family labour and resources, coupled with the maintenance of local networks based on kinship, friendship or patronage, allow farmers to continue to resolve certain of their livelihood and consumption problems outside the market' ⁶⁸

Hence, farmers' strategies vary considerably in the way farmers maintain locally specific, socio-culturally defined relations. There is also a considerable variation in the way farmers commercialize production, in time as well as in the share of produce sold on markets. A commodity may be produced for sale

at one period of time but for direct consumption during another period. The proportion of any commodity output that is marketed, rather than directly consumed, may change in response to changes in climatological conditions (drought periods for instance) and conditions which are related to the functioning of the market. It may also change, however, in response to changes in relative consumer prices rather than in relative producer prices.⁶⁹ The barter terms of exchange for consumption and production goods are closely related.

Analyzing an agricultural economy as is proposed here, has far reaching implications for further theoretical investigation: we have to reject the frameworks which emphasize linear patterns of development guided by the law of value. These frameworks either reject any degree of commoditization⁷⁰, or analyse household or petty commodity production and other forms of commodity production as regulated by the same laws of competition and accumulation as all commodity-producing enterprises under capitalism.⁷¹

In our understanding of an agrarian structure, non-commodity circuits are essential properties. It is a circuit of production and exchange unfolding itself outside the domain of capitalism despite the omnipotence of external institutions and markets. Athreya et al. (1987) claim that non-commoditized and commoditized forms of production and reproduction are both necessities for production and reproduction of the peasant household.⁷² Equally, Long (1986) maintains that one may argue that the viability and strength of commodity production rests upon a set of non-commoditized relationships. In this view commodity and non-commodity circuits of production support each other. Indeed, it can be questioned whether the agricultural sector ever can be characterised as 'generalised commodity production' as was envisaged by Marx in *Capital*, Volume I.

Van der Ploeg (1986, 1990) summarizes the world of the farm enterprise and the peasant household as the ongoing coordination of four crucial *domains of farming*. These domains are, not in hierarchical order, those belonging to family and local community, of production, of reproduction, and of the technological and institutional relations.⁷³ Mamdani (1987) depicts the Ugandan peasantry in a similar way. He situated peasant households in the midst of the 'dull compulsion' of market forces, competition for land and labour between households and the various sorts of pressures imposed on them from 'above' (the state and the local feudal landlord).⁷⁴

The specific way in which the farmer coordinates these domains gives rise to various specific relations between sectors of the economy as well as between producers (see the following section). Simultaneously, a wide range of farming strategies and styles of farming emerged in the fields. The underlying dynamic balance of commodity versus non-commodity relations and the ongoing coordination of the domains of farming are translated in the fields into various agronomic practices. Bolhuis & Van der Ploeg (1985) classified several styles of farming which are related to different rationalities for production and reproduction.⁷⁵

The emerging styles of farming may be portrayed as land/labour-intensive agriculture and machinery/capital-intensive agriculture. They must also be related to the introduction of new crops in the agricultural economy in Africa. In the first case, an extended amount of manual labour is applied in a land-intensive direction. This was classified by Bolhuis & Van der Ploeg as the so-called I-calculus. In the second style the capital-land ratio was increased, with

a diminution in the use of labour. Bolhuis & Van der Ploeg classified this as the so-called E-calculus and characterized it as an 'entrepreneurial' strategy. Common to both farm styles is the demand for investment, a reallocation of certain farm tasks and a certain degree of commoditization. In the first case, investment is required in manual labour and - if a farmer decides to integrate new technologies into his production process - in 'new' objects of labour (tea and coffee trees, graded cows instead of indigenous cattle, hybrid maize instead of local varieties, the application of fertilizer). In the second case, production also involves considerable investment in modern implements of labour and wage-labour.

It must be stressed that social forms of production (see following section) are not necessarily associated with a particular style of farming.

1.3.3. Heterogeneity and differentiation

A third dimension of heterogeneity is related to the processes of social differentiation taking place in agricultural economies. The African agricultural population cannot be treated as a homogeneous category. This is increasingly accepted among scientists from various strands of development theory and policy makers. Various concepts are used to denote the differences in the quality of life and conditions of production and reproduction of the rural population. Concepts and epithets such as 'rich peasants', 'middle peasants' and 'poor peasants' are used to stipulate the differences in the distribution of wealth. 'Capitalist farmers' and 'petty' or 'household commodity producers' are concepts drawn from the Marxist framework. These are employed to refer to the social relations under which production is realized and social wealth is distributed.

The patterns of social differentiation are generally seen as shaped by two sets of forces as a result of trends set in motion by a combination of processes of commoditization, institutionalization and intervention which reinforce the unequal socially-differentiated structure of the pre-existing locally or regional specific social formation.⁷⁶ Social differentiation is thus not merely an intrinsic phenomenon or a left over from previous conjunctures.

In the course of commoditization in Africa, two social forms of production emerged. Both forms of production are founded upon different rationales. The forms of production can be characterized as capitalist and household commodity production. In the first form, production is based on the employment of wage-labour. The rationale for production is accumulation of capital, invested in agricultural means of production and/or in other sectors of the economy. This social form of production has been delineated by Marx as the capitalist mode of production, although he stipulated that differentiation takes place within the capitalist mode of production.

The second form, household production,⁷⁷ is mainly founded upon family labour input working on family owned land. A further differentiation is usually made to indicate that within this production form the relations of production and distribution of wealth as well as the motive behind commodity production, differ significantly. The following differentiation of peasant households or peasant strata is usually made in development theory.

In the first place, there are rich peasant households. These are households having a regular marketable surplus over and above the needs of simple reproduction. The family or the separate members of these households are able

to combine returns from their labour with those from small-scale exploitation such as renting out land and implements and/or hiring agricultural labour.

In the second place, we have middle peasant households. These are able to reproduce themselves through family/household labour and family land. Reproduction is mainly mediated through market relations.⁷⁸

In the third place, there are the poor peasant households. These are unable to reproduce themselves through agricultural production only (because they lack sufficient means of production and/or family labour). Increasingly, they have to exchange their labour power on a more or less regular basis. Many poor households only sell their labour power periodically and for the rest of the year, are they not (necessarily) engaged in commodity production.

In the fourth place, there are landless peasant households. These are those households whose organic relation between land and labour has been broken. Consequently their reproduction is solely based on entering (unequal) labour relations with one or other member of a propertied class to get access to means of consumption.

The agricultural population is thus highly differentiated in terms of social relations and social conditions. Apart from being 'rich' or 'poor', they maintain different kinds of relations with the market, produce surpluses or (occasional) deficits and have differential access to the means of production (land, labour and instruments). Heterogeneity in agriculture is also in this respect produced and at the same reproduced in the process of commoditization.

Eventually, the process of rural differentiation will lead towards new agrarian class structures. The outcome of this process is, however, much debated in academic circles. One strand of theory, the Leninist and linear interpretation stresses that economic differentiation generates a tendency towards polarization of classes: between, on the one hand, a small capitalist owner class and, on the other, an increasing and numerous mass of agricultural proletarians and marginalized peasants.⁷⁹ The strategy of farmers to diversify their economic activities, represents, in the eyes of Lenin, the argument that peasants become marginalized.

The other strand of analysis brought forward the so-called middle peasant thesis: that is, that small-scale peasant production and petty commodity forms of production often survive and come to play a central role in capital accumulation, despite internal differentiation.⁸⁰ Diversification of farming strategies is interpreted by Chayanov (1966) as the sustainability of peasant forms of production which prevent marginalization. In this view, it is unlikely that the pattern of social-economic differentiation will consolidate itself in the short term into a firmly established class structure. Classes in developing countries are important but their membership is ambiguous, insecure and fluctuates considerably.⁸¹

Apart from its social content, differentiation has, increasingly, geographical significance. We refer to processes of regional differentiation and the regionally differentiated manifestation of commoditization and institutionalization.⁸² We must recognize that economic potentials of a country and the opportunities for agricultural commodity production, are conditioned by existing and diverse ecological and infrastructural conditions.

Processes of commoditization are often differentiated and uneven in their regional effect. They lead to the development of regions specializing in the production of specific commodities (such 'cash crops' as coffee, tea, cotton,

sisal, maize). These areas have become highly commercialized agricultural production zones. In these zones, production is supported by a well-developed technological and administrative infrastructure. In addition, there are regions in Africa, as well as within countries, which became predominant labour exporting areas. For the people living in these regions, labour migration to urban areas and highly commercialized agricultural regions appears to be the major source of cash. A third type of region exists which can be characterized as a combination of subsistence production with a modest agricultural surplus and/or labour migration. In the latter two regions, contrary to the first, infrastructural developments are of a low level.

1.3.4. The reproduction of heterogeneity through intervention, commoditization and institutionalization

The previous sections emphasized that heterogeneity in agriculture is an essential feature which cannot be neglected either for theoretical or for practical purposes. A synthesis of the three dimensions of heterogeneity demonstrates that heterogeneity is constantly being reproduced through intervention and through the underlying processes of commoditization and institutionalization.

The first dimension along which heterogeneity is profiled is the enormously detailed, complex and diversified body of local knowledge of the farming population. Long & Van der Ploeg (1989) emphasize in this respect an essential feature of 'external' intervention in agriculture.

'Yet, because of its own internal dynamic, externally planned intervention aimed at central control of development cannot take into account this detailed knowledge and mastery of the local situation: hence the tendency towards *standardization* (italics mine) and the consequent problem that newly-introduced models often do not concur adequately with the situation, thus producing 'underdevelopment' rather than 'development'.'⁸³

'Input package deals' and 'contract farming' or commodity production schemes are two predominant modes of intervention in agriculture which reflect the tendency towards standardization quite clearly.

'Input package deals', such as the Green Revolution, are intervention programmes centred around the introduction of new technologies. They are premised on a sort of corporate agrarian structure in which the various state institutions act as the provider of credit, extension and marketing facilities. The agro-input industry appears in this structure as the manufacturer of technologies. Finally, the peasantry are the consumers of technology, credit and knowledge which are provided by external actors and with which they produce commodities for the market.

'Contract farming' schemes are programmes in which the state, capital and the peasantry are highly interlinked.⁸⁴ They involve the realization of an agrarian structure with close supervision over peasant production by external actors: the state and/or agro-industrial companies. The latter control at the same time the marketing, processing and distribution of commodities. The actual producers are the owners of the agricultural means of production (land and implements) and have to act according to the regulations set by capital

and the state. In addition, the terms of exchange are negotiated and/or fixed by the state in advance.⁸⁵

By implementing these programmes through the establishment of a particular agrarian structure, the state hopes that production will increase and, for instance, that imports will be substituted by local production. Inherent in these programmes is the fact that the various problems in the agricultural sector tend to be identified by the intervening party with reference to 'external', Western scientific bodies of knowledge and experience. From these perceptions, a programme intended to cure the problems is proposed and implemented. This brings us to a second aspect of intervention which is closely related to the first: that intervention programmes tend to neglect the local bodies of knowledge. Instead, this kind of useful and 'capable' knowledge is vanishing and frequently appropriated from its producers in the process of intervention.⁸⁶

A 'simple' comparison between local, indigenous and scientific bodies of knowledge reveals that problems are perceived differently. Consequently, the reasons for action as well as the action themselves are different. A scientific body of knowledge identifies problems in agriculture in terms of productivity. Productivity increases are propelled by the introduction of new higher yielding technologies and improved husbandry practices (such as planting in rows, the correct time of application, monoculture). Local, traditional farm practices other than productivity increases, are also concerned with various other issues which influence the decision-making process on the farm. Socio-cultural relations and conditions and security are perceived as important. The attitude towards land, availability of labour, taste of varieties, variability in the timing of planting, the preference for maintaining a huge collection of genetic resources and mixed cropping patterns can be put forward as essential elements of local bodies of knowledge.⁸⁷

From this perspective, it is understandable that in the process of external intervention, misunderstanding, mutual incomprehension and even conflicts arise out of the interaction between these different bodies of knowledge. Intervention is often accompanied by resistance on the part of the 'target group'.⁸⁸ The transfer of new technologies and/or the introduction of specific agricultural management systems and husbandry practices may not appeal to local experiences and cultural identities.

The technology factor and the pursuit of improved husbandry practices is an essential ingredient of external intervention programmes, policies and projects in agriculture. The concrete choice as to which kind of technology or husbandry practice should be introduced is, however, not a neutral choice based on universally applicable norms and values. Technologies are social constructions or artefacts which operate under a specific code of conduct in order to be effective. Earlier we emphasized the prescriptive nature of technology. Technology transfer, as is the case with Green Revolution technologies, implies that farming strategies have to be oriented towards the market. Hybrid maize seeds and other elements of commodity packages appear as commodities in production processes. The strategic defence-line of small peasants vis-à-vis capital, the state and the market based on maintaining non-commodity relations must give way to a further penetration of commodity relations. The producers and distributors of technology, rich and capitalist farmers and the state also have some interest in the successful

adoption of new technologies by the farming population and, therefore they favour a general expansion of commodity relations in the countryside. These actors do not, however, guarantee the success of the adoption process despite their command over considerable economic and political power. They tend to push for the realization of a particular kind of agrarian structure, of particular kinds of relations between peasants and between capital-state and the peasantry.⁸⁹

Technology transfer is to a certain degree founded upon favouring specific economic interests, while marginalizing or neglecting other interests. In this way, the technology factor emerges in the fields as a production relation.

The fact that through the introduction of new technologies heterogeneity, development and underdevelopment will be reproduced continually in the fields and on farm enterprises does not need to be stressed. Heterogeneity in terms of unequal distribution of wealth and resources, relations between peasant strata as well as the various styles of farming, is reproduced constantly and even reinforced by the regional agrarian structure. Hence, as stipulated by Long & Van der Ploeg (1989) heterogeneity in agriculture 'emerges as the logical accompaniment of commoditization and institutionalization'.⁹⁰ Nor is it necessary to point out that the objective of the state to intervene may not be fulfilled in the end after all, either because of resistance from the 'target group', and/or because particular social forces are able to misconstrue the implementation of interventionist policies.

In addition to intervention, the processes of commoditization and institutionalization tend to perpetuate the dimension of heterogeneity linked to rural differentiation. Two different but related processes operate in this respect. On the one hand, there is the process which results because some peasant households or enterprises are more inclined than others to have closer relations with the market, i.e., differential degrees of commoditization. Some sell a large part of their output and integrate technological innovations into their labour processes. Other households are only marginally involved in commodity relations. The productive gains which may be part of this network of technico-administrative relations varies accordingly.⁹¹

On the other hand, the institutions which mould the network of relations with the farm enterprises do not perceive the agricultural population in similar ways. In their perception of farming, certain enterprises or peasant households seem more rewarding and more promising than others. Especially enterprises with farming styles corresponding more than others to the ideal perspective of the institutional environment of farming (high output levels, modern technology and receptive to new ideas) will become focal points of attention. This suggests, as Benvenuti (1982) has put forward, that the institutional environment for farming is 'biased'. The matrix of relations between the institutions and the agricultural population shows a considerable variance. The technology factor plays a crucial role. For many actors which are part of the agrarian structure, technology transfer is the main rationale for intervention in agriculture.

The third dimension of heterogeneity, the existence of different styles of farming, is a recognition that commoditization, institutionalization and intervention generate different patterns of agrarian growth. Farming styles express specifically the considerable variation in yields of the different agricultural systems.⁹² Variation in yields is to a considerable degree,

conditioned by ecological circumstances and the infrastructural development of the region and by the different ways in which the labour process is structured, i.e., based on the different degree of commoditization and differential relations with TATE⁹³ This does not exclude, however, the generation of different levels of productivity of land and labour. The underlying thesis will show that each farming style raised the yield of each unit of land.

Heterogeneity expressed in terms of socio-economic developments based on regionally differentiated degrees of commoditization is reproduced under various circumstances. This may partly be explained as a result of existing unequal distribution of natural and economic resources.⁹⁴

The exact outcome of the dynamic process of differentiation of the peasantry is, therefore, hard to assess. It is determined by several factors which depend on local or regional circumstances. According to Mamdani (1987) it may develop around any of the elements of the labour process: land, labour and its implements. Access to cash, either by way of straddling and/or agricultural credit and income from selling marketed produce, enables peasant households to acquire these elements and opens up the opportunity to enlarge the holding and continue to commercialize and capitalize production. Another basic factor in this process is the capabilities of a household to cope with the logic of the market, not only in terms of a market determining terms of exchange and of competition between producers, but increasingly with the factor technology. We must acknowledge that not all peasant households have equal ability to cope with these conditions. The cutting edge of this differentiation process is probably a combination of these factors. If we add the different ecological conditions for agricultural production, the picture becomes even more complicated.

The regional differences in wealth, infrastructural developments and degree of commoditization are, however, also partly set in motion by state intervention and development policies. Some regions appeared to be (completely or partially) unsuitable for agricultural commodity production, such as the arid and semi-arid regions in Africa in which pastoralists are predominant.⁹⁵ The colonial states in Africa clearly favoured certain areas at the expense of others. The alienation of the best land in some parts of Africa for white settlement and plantation production created regional imbalances which are still visible today. Remote areas were hardly incorporated, and other regions less suitable for commodity production were severely neglected. The impact of various phases of primitive accumulation in Africa long before colonization began is still visible too. One element is the massive dislocation of population due to the slave traffic to the Americas and the Arabian sub-continent which lasted from the 17th century until at least the beginning of the 20th century. Other elements are the changing trading patterns and the territorial division of Africa which disrupted migration patterns of semi-pastoralists and pastoralists. After independence many states inherited this regionally unbalanced economic structure. Colonial state intervention appears to have created rigidities which were inherited, extended and reproduced by many states.

A third element which reproduces regional differentiation involves responses of the farming population to increased population pressure on the land due to the high demographic growth rates and the deteriorating

international and national terms of exchange. In the first case, degradation of agricultural land as a result of intensive cultivation and soil erosion will contribute to a general decrease in productivity of the land and thus to less output. In the second case, deteriorating terms of exchange may lead towards a decline in marketed production.

This and the previous sections have outlined that external intervention in agriculture, and particularly state intervention and the underlying processes of commoditization and institutionalization, created different rhythms of agricultural growth and change. In the course of these processes, a foundation for an agrarian structure was laid down for the introduction of new technologies, for knowledge generation and dissemination, for marketing, processing and distribution. This structure generated and materialized relations between the state-capital and the peasantry with prospects for agricultural growth and increasing productivity of land and labour. This section also demonstrated, however, that intervention introduced and reproduced relations which increasingly impede the maximum utilization of these new technologies. Berry (1984) reached more or less the same conclusion: agrarian change in Africa 'promoted patterns of accumulation which militated against the development of enhanced productive capacity.'⁹⁶

1.4. Focusing the study: state intervention in agriculture

In the light of the above, it is not surprising that the central theme of the thesis is formulated in terms of commoditization, institutionalization and intervention. The particular focus on state intervention in agriculture is justified by the important role the state played - and still plays - in the realization of a concrete agrarian structure. In this sense, the state, or rather state institutions, may be viewed as a formally organized, intervening force in agriculture. State intervention in agriculture materializes in what is usually called agricultural policy.

Conducting research along these lines not only requires a theoretical examination of the central concepts of agrarian structure, commoditization, institutionalization and intervention, but requires also some notion of agricultural policy and the state.

Agricultural policy is understood here as the totalling of measures taken by the state to direct, supervise and regulate developments in agriculture in order to facilitate the expansion of (commodity) production in agriculture. Agricultural policy development and implementation as such are, however, neither *one* single policy nor tangible. It is crucial to highlight the following aspects of agricultural policy.

In the first place, agricultural policy is the result of various policies stretching out over a whole series of political and economic spheres (in production, circulation, ideology and legislation) covering several other economic sectors (industry, commerce and the service sector). Non-agricultural policies, such as exchange rates, currency devaluation and protection of the industrial and commerce sector through tariffs and retail price fixation, also have repercussions on agricultural development.

In the second place, the state is mandated to regulate markets and to manage technological developments, to facilitate the expansion of agricultural commodity production and to determine the concrete conditions of

production. In this way, the state became a powerful intervening party and an important mediator of the social relations between the actors who shape the agrarian structure of the country. This also means that, in practice, various other state apparatuses covering several economic sub-sectors, rather than only a ministry of agriculture, are involved in agricultural policy development and decision-making processes.

In the third place, agricultural policy is also an ideological expression of society upon which the state rests as an organizing entity. This requires, before we continue to reflect on state intervention, an outlining of how the state will be viewed in this thesis. Here we shall start from a 'flexible' image of the state.

Following Skocpol (1979), Young (1982) and Shanin (1982), we may picture the state as existing on two levels. The state, is on the one hand, a concrete matrix of institutions (or apparatuses) through which rule is exercised with three branches of governance: legislative, executive and judicial. The state is an organization, an ensemble of administrative, policing and military institutions coordinated by an executive authority controlling (or attempting to control) territory and people.⁹⁷ The state as the organized public sector of society takes shape when we include instrumentalities such as political parties, regulatory bodies, parastatal companies, social agencies (media, schools, medical facilities), regional administration and local government bodies.

On the other hand, the state is an ideological expression of a public doctrine of rule and authority, of social order and stability. The latter finds formal expression in constitutions and jurisprudence, through which its structures are specified and its commands concealed in a code of prescriptions. Its public doctrine tends to incorporate the values that prevail among the dominant social strata. The state bureaucracy is likely to be disproportionately recruited from these groups.⁹⁸

Central to the flexible state view is that political processes may be relatively autonomous from the economy; the state as such occupies a relatively autonomous position vis-à-vis the economy. The interests of that economy are internalized in the state, but other interests in society operate upon the state. State-society relationships reflect and embody class structure and ethnic (or religious) configurations, and the state is at the same time an organizer of an unstable equilibrium of compromises reflecting the power and weakness of various classes and social categories in society.⁹⁹

The state is, thus not solely seen as a vehicle structured to facilitate accumulation of capital by the all-powerful international and/or national ruling classes.¹⁰⁰ By doing so, we would exclude a relatively autonomous role of the state bureaucracy. Moreover, because of that equilibrium which must be maintained, state-society relationships exist in which the state regulates markets and supplies public sector goods in order to coax private sector compliance with national goals articulated at the highest levels of the state apparatus.¹⁰¹ Decisions are made by the state which may not correspond with the power or the short-term interests of the ruling class. Such state autonomy vis-à-vis private interests results in an intervention practice of the state that responds to the preferences of state officials rather than to preferences of farmers or other key actors in society.¹⁰²

Hence the importance of stressing the practice of 'labelling' by state officials. This refers to the tendency for individuals or groups of individuals to use different category systems to reduce the complexity of their environment

and to organize their behaviour¹⁰³ Based on these category systems, problems and target groups are identified as well as possible solutions arrived at It is quite common for state officials to associate 'peasant' with backwardness, resisting commoditization and engaging in subsistence production 'Farmer', on the other hand, is associated with modernity, receptivity to new ideas and highly commoditized production¹⁰⁴ The state bureaucracy acts also frequently accordingly, as it tends to give preference to the so-called 'progressive farmer' Labelling therefore legitimates the diagnostic and therapeutic measures undertaken by public bodies¹⁰⁵ Benvenuti (1982) linked this with a certain bias of the institutions vis-à-vis the farming population Byres (1977), for instance, highlighted in the fact that technological innovations have been legitimated politically with *egalitarian* ideologies Institutional change has been moulded in such agricultural production forms as cooperatives, community development, *ujamaa villages* Technological improvement has been covered by its proponents with a sauce of scale-neutrality¹⁰⁶

In addition, it is important to stress that state intervention is not based on a specific mode of organization in agriculture The state is, so to say, not attentive to the organization of the labour process The decision on how to organize the labour process on the farm by self-regulation of work through family organization or by employing wage-labour imposes no necessity for the state to implement a public doctrine of authority, rule and social order¹⁰⁷

State intervention in agriculture, that is, agricultural policy, also involves ideological aspects in order to secure the economic and political integration of the agricultural population in a development strategy¹⁰⁸

The functions of the state are generally summarized as follows¹⁰⁹

In the first place the state must secure consensus by securing the acceptance of the general objectives of a development strategy by all ethnic groups and classes in society

In the second place: it must secure the conditions for production and the development of productive forces by legislation and regulation and by investment in agricultural R&D The state must guarantee the operation of various commodity markets (in land, labour, inputs, output) This is reflected also in the development of TATE and the relations it embodies As is the case of the colonial state, the rationale behind the contemporary state's intervention in the economy is to guarantee the (enlarged) reproduction of commodity production and exchange In addition, the representation of the nation abroad and the maintenance of foreign aid relations are perceived as specific state functions It was already indicated in section 1.1.2 that foreign aid plays a crucial role in the realization of TATE As a result of foreign aid relations, the state can be found in a rather uneasy position because particular demands of foreign aid institutions The state may be forced to implement measures which do not correspond either with its own perceptions or with particular interests in society¹¹⁰

In the third place: it must secure and maintain social order by means of social and political integration (by education), reproduction of labour power (health care) and redistribution of wealth and means of consumption in order to guarantee livelihood for all classes and groups, particularly of the subordinate classes and groups

The political and economic conflicts which may arise out of economic conflicts within society or out of the relative autonomy of the state vis-à-vis the ruling class necessitates, what Gramsci has depicted as consensus/hegemony and force/dictatorship. Both are reflected concretely in the state apparatuses. Dictatorship and hegemony are state forms; force and consensus are state functions. Force apparatuses are the army, police and judicial power. Hegemonic apparatuses are churches, corporations, foundations, political parties and education. Gramsci emphasized that both types of state apparatuses comprise elements of force and hegemony. The state is in other words not simply an instrument of force. Consensus, and with that hegemony, has to be organized constantly: through alliances and negotiations between classes and groups and through culture and ideology by means of adoption and integration of new ideas, values and philosophies. Culture and ideology become a sort of cement for the masses.¹¹¹

Hegemony and consensus require what Jessop (1983) has characterized as the formulation of a 'national popular project' and what Charney (1987) delineated as 'politico-ideological leadership.' It is based on a development strategy the realization of which advances the interests of all groups and classes. Simultaneously, however, the state is in a position to resort to force. Force may also involve political intervention of the state in society. Force employed through the various branches of governance enables the state to repudiate alternative development strategies.¹¹²

Leadership and clientelism in particular are an essential ingredient, particularly in times of economic and political crises.¹¹³ Leadership and clientelism in the African context may be connected with the function of the President as the head of state and father of the nation. The President as a leader is perhaps the only person who while using state power and resources, is capable of offering countervailing powers and alternative strategies. Leadership may be important to maintain unity (where it does not exist, to coax unity) among the ruling classes and in the state apparatus itself. Leadership and clientelism may also be crucial for ideologically cementing the relations between the ruling class, the state and the subordinate classes and groups. It is crucial to secure the integration of subordinate classes and groups into the nation-wide development project or strategy. Recently, it has been emphasized that the political and economic integration of the peasantry through patron-client relations and institutional relations may result in contradictory relations. Holmquist (1984), Scott (1985) and Long (1989) maintain that integration creates at the same time political space for the peasantry to carry out their own projects.¹¹⁴ Huizer (1972) argued that the peasantry's creation of their own room to manoeuvre may be interpreted as a specific expression of class struggle.

The state may, to summarize, be treated as an ensemble of different institutions, defining policy objectives, providing services and highly involved in agricultural R&D programmes. In addition, the state highly regulates production activities and is very committed to the operation of markets for inputs and various commodity output markets. The expansion of commodity production and commodity relations may be delineated as the economic basis of state policy. Institutionalization of crucial administrative and technological tasks appears then to be the necessary and appropriate vehicle to implement

the stated objectives. While implementing policy and fulfilling its economic functions, the state bureaucracy appears responsive to the demands of particular pressure groups in society. Simultaneously, the state is attempting to control and manage development according to the perceptions of its cadres.

A useful way to analyse state intervention is to distinguish objectives or principles from policy formulation and policy implementation.¹¹⁵ (State formulated) objectives involve concepts of social order and stability and social and political integration. Successful implementation is either guaranteed by force or by maintaining a certain equilibrium in society and the general acceptance of the objectives of development by all classes and ethnic groups. Policy objectives belong to what has earlier been labelled as the ideological expression of a public doctrine of social order and stability. These objectives are usually articulated at the highest level of the state apparatus, by the political leadership of the country.

Policy formulation and policy implementation involve actions through members of the state bureaucracy and state-institutions. Some of these institutions are closely connected with the exercise of state power. Others may be only remotely connected.¹¹⁶

By studying policy formulation and implementation we are able to determine whether these reflect the specific compliance with or determination of objectives by the state bureaucracy, or whether they reflect the degree to which certain class and/or ethnic interests are articulated at state level. During the policy formulation stage, various instruments and means are defined in order to reach the stated policy objectives. They contain measures (in the case of agriculture) on how to organize commodity production: legislation, price setting, promotion of a certain kind of agricultural technology, time schedules and the general identification of target groups. These policy objectives and the total package of measures to be taken are published in national and regional development plans. The implementation phase is the practice of state intervention: that is what can be 'measured' or 'observed' in society or in the fields. This level enables us to monitor and to question the efficiency of state policy and the effectiveness of state intervention.

Policy formulation and implementation must be flexibly interpreted in order to understand existing deviations between policy and the effects of policy as well as the variation in the effects of state policy.

In the first place, it is crucial to recognize that policy formulation already involves compromises as a result of negotiations between the state bureaucracy and certain (often dominant) classes and/or ethnic interests. At state-practice level we have to recognize that there exists 'space' or autonomy for the state bureaucracy to implement state policy. Hence, the importance of stressing 'labelling' in our theoretical and methodological considerations about the state, the ability of the state bureaucracy to grasp farmers' logic and strategies, the fact that state institutions may be closely or only remotely connected to the exercise of state power and the emphasis that state agricultural policy involves various state institutions.

In the second place, a flexible interpretation is necessary to leave room for the influence of pressure groups and organizations such as traders, industrial entrepreneurs, large-scale farmers or small-scale farmers whose interests are not necessarily actively represented at state level.

In the third place, a flexible interpretation is needed to understand that despite the fact that state intervention may be a powerful instrument of the ruling class and/or state bureaucracy to order society according to their perceptions, peasants are able to manage developments according to their own outlooks and logic

In all three 'cases', or a mixture of the 'cases', it is understandable that state intervention may possibly result in unplanned and unintended practices

1.4.1. Research questions, data collection and levels of analysis

After this extensive exploration of the various theoretical fields of interests in which the research will be carried out, the main research question may be summarized as follows: what are the characteristics of Kenya's emerging agrarian structure, and, how were these characteristics shaped by the processes of commoditization, institutionalization and intervention in agriculture? What kind of social forces spawned, in the past and present, Kenya's agrarian structure?

Since the vehicles for intervention in agriculture (in the context of our case study - Kenya - intervention in agriculture through enhancing commoditization and institutionalization) became through time largely concentrated within various state institutions, the following questions appeared in the course of the study as particularly important:

(1) What is the effect of state intervention? To what extent is state intervention effective and efficient as well as consistent with the formulated policy objectives?

(2) Is state intervention in agriculture guided by a dynamic conditioned by the state bureaucracy or is state intervention commanded by forces operating outside and upon the state?

Various policy fields can be identified to examine these research questions. Two particular policy fields which are important elements of Kenya's National Food Policy were perceived as essential for an examination of the conditions of production and how these were laid down by state intervention.

The first particular 'test case' is related to the technological conditions of agricultural production. What kind of technologies and related commodity packages are introduced by the state to increase production? How is agricultural research and dissemination of research results organized? Does an analysis of technology transfer suggest that during the process frictions of social and economic nature occurred which impeded the maximum utilization of new technologies? Or is technology reshaped by the users in the fields and during production? The production of maize, the staple food in Kenya, is used to examine this aspect.

The second particular 'test case' is related to state intervention in the circulation sphere of the economy. How and why does the state regulate prices and marketing, is it efficient and if not, why? Is it ineffective because the state is not able or does not want to understand the logic of farming strategies? Or are price regulations and market controls instruments of the state to further objectives which are as a rule not related to market supply and demand? What kind of social forces operate in these policy fields?

The research questions are examined on two spatial levels: the national level and the regional level. Data collection took place in various phases, between 1984 and 1990, on these two levels.

The national level analysis is required to address state policy development and orientation. It involves a historical analysis of the development of the state in the country. In fact, Kenya's history may be periodized according to the several stages during which the state was formed and structured. In addition to that, the centrality of the state and state-society relations can only be examined in an historical context on the national level, not only because of theoretical and historical considerations but also for practical reasons. On the one hand, this is so because policy formulation (such as crucial decisions related to technology development, dissemination and marketing arrangements) is still undertaken on the national level by the highly centralized state apparatuses - this despite that there is a tendency in Kenya to decentralise planning and policy implementation. On the other hand, a national level analysis may capitalize on the research endeavours of various authors and on the evaluation reports by various development institutions and state-installed working parties. In addition, various visits to Kenya were used to make a tour through the institutional environment for farming in the country, such as various ministries, development organizations, research institutions and companies in order to conduct interviews and collect data and reports which were in different stages of publication.

The regional level is included because the specific regionalized agrarian structure elaborates the working of various historical processes and social forces which formed that structure. At this level, detailed information can be gathered in order to assess the regional specific outcome of intervention, commoditization and institutionalization. From this we are able to examine the complexes of heterogeneity generated by the agrarian structure.

Kenya is divided for administrative purposes into various units. In hierarchical order these administrative units are provinces, districts, divisions, locations and sub-locations. The field work was carried out at district level: Nandi district which is situated in Kenya's largest province, Rift Valley Province. Within Nandi district six sub-locations were chosen to carry out a farm level survey conducted between August and November 1987. The details of the sample and the method of sampling are accounted for in Appendix I.

The research concentrated on Nandi district for two reasons. (1) Characteristic for Nandi district - and from our analytical perspective, its advantage - is its clear history of commoditization. Nandi became a major maize surplus producing area. (2) Nandi is labelled as a rich region endowed with fertile soils with constant rainfall patterns where an affluent peasantry predominate the picture of peasant differentiation. Nandi district was selected in close cooperation with the Institute for Development Studies (IDS) of the University of Nairobi.

1.5. Outline of the thesis

Starting from these research questions and levels of analysis, the following outline of the book emerged.

Chapter 2 comprises an historical analysis of colonialism and the colonial state in Kenya. An important element in the analysis is the politico-economic structure which emerged during the period of colonial rule. The colonial and

the British state played a crucial role in this respect. Although the white settlers represented a dominant political force in the first period, their influence was diminishing. The Great Depression during the 1930s as well as changes on the international and national level shortly before and after World War II, gave rise to political and economic reforms implemented in the early 1950s. An understanding of the politico-economic events before and after W W II, which triggered of these reforms, is crucial. During this period in Kenya's history the basic politico-economic features of the country's contemporary agrarian structure were gradually laid down. This episode is particular relevant for tracing the origins of Kenya's ruling class and appeared to be a real watershed in Kenya's history, as is the case in many other former colonies in Africa.

Chapter 3 examines the instruments and institutions created by the state to implement agricultural policy. It delineates the roots of Kenya's contemporary agricultural policies which can be traced back to reforms implemented by the colonial state in the 1950s. Essential for policy implementation are the financial-economic determinants and the high run expectations of that various classes and groups had from Uhuru. This chapter also highlights the importance of foreign aid. Maintaining foreign aid relations is essential to the state and the exercising of its economic functions.

Chapter 4 deals with the rhythms of agrarian change after the transfer of state power to an independent government. The agrarian structure formed during the colonial period triggered off an enormous expansion of commodity production and relations in the countryside. This chapter pays particular attention to the impact of commoditization and institutionalization on Kenya's agrarian structure: the emergence of what may be called structural variance, i.e., various forms of production as well as socio-economic and regional differentiation.

Chapter 5 contains an analysis of the history of commoditization and institutionalization in the regional context: Nandi district. An attempt is made to retrace that history from approx. 1850 onwards to the 1970s. The peculiarities of Nandi's agrarian structure will be examined and how it was formed by the non-involvement of the colonial state in economic developments up to the mid 1920's. After that, the state intervened strongly with commoditization of agricultural production as a logical outcome.

Chapter 6 describes the structure and dynamics of the peasant economy in Nandi district. Equipped with the methodological handouts outlined in section 1.3., we shall describe the essential features of Nandi's agrarian structure: forms of production, social heterogeneity, distinct farm styles and farming strategies. A quantitative analysis of data gathered at the farm enterprise level enabled us to assess (1) the impact on, and contribution of new technologies, to agricultural development and growth; (2) the patterns of agrarian growth generated by commoditization and institutionalization.

Chapters 5 and 6 examine, how through state intervention, institutionalization and commoditization have a selective character.

Chapter 7 attempts to identify the selectivities of state intervention. Based on various sources of literature we are able to evaluate the effectiveness of state intervention and to identify whether the instruments of state intervention are attuned to reality. The chapter concentrates on the technological and administrative components of Kenya's National Food Policy: marketing, price

fixation and the role of agricultural research, extensions services and credit Results from the Nandi survey and other surveys facilitate a portrayal of the nature of state intervention in agriculture in Kenya

Chapter 8 is a retrospective chapter. It involves an analysis of the state and state-society relations. It emphasizes what kind of social forces have spawned the agrarian structure in the country, on the national level. An important aspect of state-society relations for future political and economic developments is whether the state bureaucracy is able to identify the properties of Kenya's agrarian structure.

Chapter 9 is an epilogue, an attempt to look back. The results of the previous Chapters 2-8 will be confronted with some of the theoretical considerations in the first chapter. In addition, future research fields will briefly be emphasized.

Appendix I is an account of the methodology of the Nandi survey.

Notes

1 See Williams (1978) and Brewer (1980) for an overview and critical assessment of the debate on imperialism and (under)development.

2 Long (1986), pp. 10 ff, Bernstein (1979), p. 424. See also Byres (1977), Cliffe (1977) and Saul & Woods (1971).

3 See Jessop (1983), p. 91 and Long (1984), p. 10.

4 Long & Van der Ploeg (1989), p. 238.

5 Long (1989), p. 223.

6 Hindess (1986b), p. 122 and Hindess (1986a), p. 129.

7 Long (1989), pp. 224, 225.

8 Hindess (1986b), p. 115.

9 Hindess (1986a), p. 129.

10 See Shanin (1982), pp. 300-313.

11 Long (1986), p. 19.

12 Bio-technology is, as other land and labour saving technologies, an attempt by agro-industrial enterprises to solve the limits of valorization of capital in agriculture. These limits are related to seasonality of agricultural production cycles as well as to the limitations of real subsumption of farm labour to capital. For a discussion of these issues see also Mann & Dickinson (1978) and Goodman & Redclift (1985). Ruivenkamp (1989), Kloppenburg & Kenney (1983) and Haude (1983, 1985) provide a framework for the analysis of the impact of bio-technology on the agricultural sector and the farming population.

13 See, for instance, Kautsky, summarized in Banaji (1980), p. 39 ff.

14 Marx, quoted in Mann & Dickinson (1978), p. 479.

15 Bernstein (1988) clearly defines the theoretical assumptions for this re-formulation of the agrarian question, although his theoretical position may still be criticized, see Long & Van der Ploeg (1989).

16 See, for instance, Kautsky/Banaji (1980), Djurfeldt (1981) and Raikes (1982) for the West-European context, see Amin (1972, 1973), Bernstein (1979) and Mabogunje (1980) for the African context. Among many others, Rey (1973), Merlier (1962) and Mamdani (1976) provide detailed regional studies of the penetration of capitalism in Africa.

17 Amin (1972) in particular stressed the regional differences in colonization and the impact on production patterns in agriculture. It is emphasized by Amin that the colonization of Africa by Europe's major colonial nations, Great Britain, France, Portugal and Belgium cannot all be treated in the same way.

18 Amin (1972) emphasized that trade relations between mediaeval Europe and Africa were characterized by Europe having nothing to offer to Africa. Through the maintenance of trade relations with Africa, the African continent produced commodities (gold, salt, iron, slaves) upon which in Europe development could materialise but the terms of trade were unequal.

- 19 See Chapter 2, section 2.1 For Africa in general we can refer to the empirical research results of the 'articulation of modes of production' theory (in particular Amin (1973), Rey (1973), Meillasoux (1980), Cocquery-Vidrovitch (1977))
- 20 Plunder, the slave trade and simple collection of naturally grown crops can hardly be characterized as systematic 'use' of existing resources (men and nature)
- 21 Long (1986), p. 9 Long attributes the background of this definition to Marx's treatment of commodities. Commodities are not only objects of utility but also bearers of exchange value. The commodity equivalent which emerged as the socially accepted form of measuring its value is money. Marx's famous analysis of the fetishism of commodities stipulates that when commodities are exchanged, their relationships do not rest simply on that between things. Commodity exchange conceals the more fundamental social relations of production.
- 22 This distinction is made by a.o. Cowen (1983) p. 202
- 23 By stipulating the process of capitalization we can surmount the one-sidedness of emphasizing exchange relations only. There is still an almost exclusive preoccupation with exchange relations in the various strands of development theory and with the effectiveness of state intervention in agriculture. The crisis in African agriculture is explained as resulting mainly from 'external' exchange relations (adverse terms of international trade, siphoning of surplus towards capitalist centres) and/or 'internal' exchange relations (unfavourable terms of trade between agriculture and industry as well as the favouring of large-scale farmers at the expense of small scale farmers). The local state apparatuses and institutions in particular are subject to many critical assessments of their influence and scope and the efficiency of their policy instruments. Research results point at corruption and inefficiency and at aspects such as low and differentiated producer prices, i.e. mechanisms by which an unnecessarily high amount of surplus is extracted from the agricultural sector and from the small peasant sector in particular. This surplus is generally invested in the industrial sector or used for luxury, conspicuous consumption. These views are shared by proponents of dependency theory, the basic need school as well as by the technocrats of the World Bank and the IMF. Lofchie (1985, pp. 176-185) sums up the debate, but remains trapped within the same rather limited perspective. See also Communs (1984), Vengroff & Farah (1985) and Bates (1981, 1983). However, despite these theoretical limitations, the empirical results of this kind of analysis can be extremely useful and very illuminating.
- 24 See Bernstein (1979) and Berry (1984)
- 25 Ibid., p. 424
- 26 Ibid., p. 427
- 27 Ibid., p. 433
- 28 See Huizer (1972), chapter III for a discussion
- 29 Similar ideas can be found in George (1979, 1984), Garcia (1984), Potter (1985), Boulding (1977), Barraclough et al. (1985) and Arroyo (1978, 1979). The jargon and level of abstraction is, however, much different. Whereas George, Garcia, Barraclough, Potter and Boulding apply the concept 'food system', Arroyo introduced the concept 'agro-industrial production chain'. I prefer to use 'network of institutions and relations' to denote the same process. In this respect I follow Benvenuti (1975, 1982, 1985). See also Bardhan (1989) for an economically oriented analysis of agrarian institutions.
- 30 Bernstein (1979), pp. 433, 434, Long (1986), p. 15 and also Lele (1987) and Ruttan (1986). This is, however, beyond the scope of this book, but the role of foreign aid is only partly explained by this analysis. Foreign aid must also be viewed from the viewpoint of the donor state. The interest of the foreign aid agencies in commoditization and institutionalization in the Third World is also very clear from the perspective of the host country. Bilateral aid, for instance by means of balance of payments support or import support (which is often tied aid), appears to be a perfect opportunity employed by the donor state to support national industries in conquering markets overseas, for technology and supplies. Official Development Assistance (ODA) apparently functions as a strong support for internationalization efforts of national firms. See Hoebink (1988) for an analysis of Dutch foreign aid.
- 31 Externalization is the foundation of capital's role definition in agriculture. It is defined by Goodman & Redclift (1985), pp. 240-241 as 'partial appropriation'. When elements of the rural labour process over time became amenable to industrial reproduction, capital penetrated that sector. In addition to that, agro-industrial capital increasingly penetrated sectors which were previously considered as farmers' tasks: processing, marketing and distribution. This process

defines at the same time the origins and the development of large agro-industrial complexes of international firms. See also Arroyo (1980), Haude (1985) and George (1979)

32 See also Lacroix (1981), Goodman & Redclift (1985) and Long (1988)

33 Since 1971, the international efforts to raise productivity in Third World agriculture have been coordinated by the Consultative Group for International Agricultural Research (CGIAR) and is led by the World Bank and financed by Western countries and private institutions such as the Ford and Rockefeller Foundation. Two of the first institutions emphasizing the need to introduce high yielding varieties are CIMMYT (mainly maize research, based in Mexico and sponsored by Rockefeller Foundation) and IRRI (rice research) in the Philippines. CIMMYT started in the early forties in Mexico, IRRI started somewhat earlier. The start of the Green Revolution during the 1960s can be attributed to these two institutions. See also Oasa (1987) and Plucknett et al. (1986)

34 See Dahlberg (1979) and Staatz & Eicher (1984) for an overview of the literature concerning this subject and also The Trilateral Commission (Colombo, Johnson & Shishido, 1977)

35 Dahlberg (1979), p. 66

36 Staatz & Eicher (1984), p. 9

37 Van der Ploeg (1987), p. 1 conceptualizes scientificization of agricultural practice as 'the systematic and ongoing reorganization of agricultural practices along the models created in and by agricultural sciences'

38 For those farmers who have tried to retain seeds from previous hybrid maize production cycles in order to multiply the seeds themselves on the farm, the result was rather disappointing: yields went down dramatically

39 See Lawrence (1988) p. 60 and Byres (1982)

40 See FAO Production Yearbook and World Development Report, various years.

41 See also Delgado et al. (1987), Paulino (1987) and World Bank (1981, 1984a)

42 World Bank (1982a), p. 6

43 Trigo (1986), p. 38. He stresses that not all the institutional formats are equally effective

44 World Bank (1982a), pp. 6, 39

45 See for instance Sender & Smith (1986) for an analysis of World Bank views on prices for agricultural commodities

46 A crucial element in World Bank analysis is that the agricultural sector has to develop strong linkages with the rest of the economy through which the importance of agriculture, supposing that the linkages are sustainable, will diminish in the long run. Agriculture, as is already the case in industrialized countries, will generate a much smaller part of the net value added, net output, employment and income. The international economy - by means of trade, technology transfer, private capital investment and foreign aid - will now as in the future, contribute to the transformation of the agricultural sector. A number of changes recently made have already borne fruit, but in the eyes of the World Bank serious problems remain to be solved. The Bank refers in this context primarily to the protectionist agricultural policies of the industrialized countries limiting the access to markets for producers from developing countries (World Bank, 1982a, p. 40)

47 This is clearly recognized by the agro-industry lobby. Pelosky (1983) reviews the opportunities for agribusiness in Africa in relation to the changing policy orientation of African countries which 'are much more liberal and realistic than in the past'. He emphasizes that the drop in prices for Africa's main export crops 'will require increased value adding through processing if countries are to maintain their foreign exchange earnings. Food processing possesses significant growth opportunities for agribusiness. Other opportunities exist in researching, developing, and implementing new technology packages for subsistence farming. Firms with marketing expertise can assist indigenous private companies in developing appropriate marketing techniques. Improved transport and storage systems are required ()' (Pelosky, 1983, p. 20). The prospects for corporate development of agriculture in relation to increased use of modern technology is also emphasized by The Trilateral Commission report (Colombo, Johnson & Shishido, 1977)

48 See Ruttan & Hayami (1984), Delgado et al. (1987) and Long & Van der Ploeg (1988, 1989). This does not mean that the World Bank, for instance, views state intervention and state control over the conditions of production as effective. The Bank relates development failures in Africa to the centrality of the state in input supply and in the organization of marketing (World Bank, 1981, p. 58). The Kenya case shows quite clearly that the World Bank opts for

much less state involvement (privatization) and a smoother coordinating role for the state in the economy

49 Long (1988) and Long & Van der Ploeg (1989), Seidman (1983), Jessop (1983) and discussions with colleagues were useful sources to define the notion of intervention

50 See Baum & Tolbert (1985) who give a detailed theoretical and practical account of how and why projects are the best instruments for intervention in the agricultural and other sectors of the economy

51 See Seidman (1983), p. 12 ff

52 See World Bank (1981, 1984, 1989). The latter report confesses what went wrong in Africa in the 1980s. Various structural adjustment programmes of the World Bank and IMF did not produce the radical changes which were supposed to be triggered off by these programmes. The African state appears to be an ineffective apparatus and the human element in development processes remained invisible. 'Beyond adjustment' is now the new slogan. It was also the slogan of a congress on Sub-Saharan Africa held in Maastricht, July 1990, organized by the Dutch Ministry of Development Cooperation and various Non-Governmental Organizations

53 Bernstein, in a lecture held in Wageningen in 1985 stressed three aspects of development in Africa and other parts of the world which can be related to commoditization, institutionalization and intervention. He predicts that in the course of commoditization, socio-economic differences between regions, differentiation of the peasantry and the importance of off-farm income for the agricultural population will increase. Long (1986), pp. 10-16 summarizes Bernstein's lecture

54 See, for instance, Hayami & Ruttan (1984) and World Bank (1982a) comparing countries on their agricultural performances. See also Bolhuis & Van der Ploeg (1985)

55 See, for instance, Byres (1972, 1977, 1981), Griffin (1979) and Galli (1981)

56 A middle position is elaborated by Lipton (1989). He argues that as a result of the critique on the Green Revolution, the nature of the seeds has changed dramatically (he prefers to label them as modern seeds instead of high yielding varieties). The seeds have changed in the sense that the optimism of the 'modernizers' has been tempered and that at the same time the technicians did something with the socio-economic critique on HYVs

57 See Pearse (1977, 1980), Barraclough et al. (1986), Moore-Lappe & Collins (1977, 1986) and George (1976, 1979, 1984)

58 See, for instance, World Bank (1981, 1984a) on donor coordination and Lele (1987), Payer (1982), Killick (1984) and Wood (1980) about the influence of the international development agencies on policy development in Third World countries

59 This strand of development theory, the articulation of modes of production theory (represented by Amin, 1973, Meillassoux, 1980 and Rey, 1973) has been admired for its contribution to a demystification of the 'dark, static and backward' African continent. In addition, it helped to bring about the view that Africa is not a homogeneous continent and produced guidelines for the understanding of the mechanisms of state intervention and capitalist penetration in 'old modes of production'. Simultaneously, this strand is heavily criticized for being structuralistic and mechanistic. See Booth (1985) for a detailed analysis

60 See, for instance, Hart (1984). Hart's position is very close to those held by modernization theoreticians

61 See O.A. Lewis & Berry (1988), Glaeser (1987) and Timberlake (1985)

62 Godelier (1978), pp. 736, 764. Godelier's full definition is as follows: 'These sets are

(1) The specific ecological and geographical conditions within which a society exists and from which it extracts its means of existence. (2) The productive forces, i.e. the material and intellectual means that the members of a society implement, within the different 'labour' processes, in order to work upon nature and to extract from it their means of existence, thereby transforming it into a "socialized" nature (i.e. the ability to transform nature generally embodied by knowledge that a given society may have of nature, but also its body of technical processes, of rules governing the manufacture of tools, and the perception of the individual how to organise the labour process, etc. p. 74). (3) Social relations of production, that relation of any kind that assume one or another (or all) of the following three functions: (a) determining the social form of access to resources and to control of the means of production, (b) allocating the labour force of a society's members among the different labour processes which produce its material base, and organizing these different processes, (c) determining the social form of redistribution of the product of individual or collective labour and, consequently, the forms of

circulation and non-circulation of these products. What Marx called "mode of production" or 'social form of production' are in fact the various aspects of these combinations

63 Long (1989), p 230, 231 This definition is rather close to Marx's (1975) description of economic system and economic structure which he made in the introduction to the *Grundrisse*. See also Garcia (1984) for an exploration of similar geographical and methodological guidelines for research on food systems and society

64 See for instance Van der Ploeg (1989) and Van Kessel (1990)

65 Long and Van der Ploeg (1989), p 236

66 Van der Ploeg (1986), p 43, op cit See also Athreya et al (1987), Bernstein (1981) and Cleave (1974) The latter uses degrees of commercialization

67 See Cowen (1986), p 364, Long (1986), p 16 and also Long (1984) We shall return to this issue in the Kenyan context in various chapters.

68 Long (1986), p 19

69 Cowen (1983), p 218

70 Among the best examples of this kind of theoretical neo-Marxist and rather orthodox framework are Friedman (1980) and Gibbon & Neocosmos (1985) The latter reason as follows. '() once peasants systematically produce commodities, they are all controlled by definite and precise forms of capitalist relations which acts as the absolute limits of their activity. There are only two 'degrees' of commoditization: systematic or generalized commodity production (which includes petty commodity production as well as capitalist production) or occasional and non-generalized commodity production () but part of a different non-capitalist mode of production' Bernstein (1986, 1988) gives a detailed account of the theoretical presuppositions and implications of this framework

71 See, for instance, Bernstein (1988), p 262 ff

72 Athreya, et al (1987), p 160

73 Van der Ploeg (1986), p 30, 31 Note that this notion of coordination of domains is an integration of two theoretical strands of agrarian sociological analysis, that of Chayanov (the internal structure of the family farm) and that of Benvenut (the family farm in relation to the technological and institutional environment for farming)

74 Mamdani (1987), pp 193-198

75 See also Lacroix (1981), Van der Ploeg (1990) and De Steenhuisen Pijters (1990)

76 Cliffe (1977), p 198, Mamdani (1987), pp 210, 211 and Bernstein (1979), p 431 See also Ennew, Hirst & Tribe (1977)

77 I do not use the much applied concept of 'peasant mode of production' After a lengthy discussion Ennew, Hirst & Tribe (1977, p 310) conclude, to which we subscribe here, that 'there is no concept of 'Peasant Mode of Production' There are only specific forms (italics mine) of agricultural production, worked and managed to a greater or lesser degree by household units. The conditions of existence of such households units and their relations to other forms of production are specific to the mode of production in which they exist' Bernstein (1979 p 437), too subscribes to their conclusion 'There is no essential peasantry,' implying that 'it is impossible to talk about peasants as a class' in general terms'

78 Mamdani (1987) makes a further distinction between upper middle, middle and lower middle peasant households. Upper middle peasant households are those who could marshal an occasional surplus to enter exploitative relations. Lower middle peasant households on the other hand are those who are faced with an occasional deficit forcing them to enter labour relations, however irregularly. Middle peasants are those households whose reproduction is based on family labour and family land and have no regular economic ties other than to the market

79 Lenin (1982)

80 See also Cliffe (1976, 1977), Bernstein (1979), Jorgensen (1981) and Mamdani (1987)

81 Long (1986), p 16

82 What Amin (1972) analyzed on the continental level, can also be witnessed within countries

83 Long & Van der Ploeg (1989), p 236

84 According to Arroyo (1978, 1980) and George (1979), contract farming arrangements are an essential element of the world-wide strategy of international agro-industrial firms to control agricultural production and to direct the most profitable operations in agriculture. These are the sectors of the economy which they dominate: processing and distribution. These are the economic sectors where the largest share of value added is being realized. This point is also made by Wessel & Hantman (1983). International agro firms increasingly abandon large

production units and transfer the production of agricultural commodities to independent producers. The risks involved in agricultural production (labour constraints, costly management of plantations, climatological conditions) are shifted to the 'contract' farmer. Contract farming arrangements are also quite common in Western European countries (see Mackintosh, 1977). Kirk (1987) stressed that this strategy avoids the negative images generally evoked by plantations, even in countries where until recently plantation agriculture was rather strong (in Sri Lanka, India and Kenya for example).

For detailed studies about the structure of world wide agriculture and the impact of agribusiness in local developments in agriculture see Feder (1977, 1981, 1983), Clairmonte & Cavanagh (1981), Clairmonte (1981), Haude (1983, 1985), Dinham & Hines (1983, 1984), Burbach & Flynn (1980) and Barker (1985). Kinsey (1987) provides an account of how agribusiness projects and programmes may contribute to agricultural development in Third World countries.

85 Allen (1980) provides an example showing that contract farming arrangements are not always successful. He describes a particular illustrative case for Nigeria where a state-Cadbury Schweppes managed tomato production scheme was abolished because peasants refused to participate. The most obvious reason was the unfavourable terms of exchange.

86 See also Mendras (1970) and Arroyo (1978).

87 See Van Kessel (1990), Van der Ploeg (1989), Ntaji (1990), Richards (1985, 1986, 1988), Drinkwater (1988) and Allan (1960). Although there may be limitations attached to indigenous knowledge systems - clearly ventilated by Drinkwater and Ntaji - the authors all view the farmers as viewed as 'knowledgeable' and 'capable' in designing their own life-worlds and livelihood strategies.

88 Drinkwater (1988), chapter IV, provides a detailed analysis and description of 'misunderstanding' and 'resistance' in Zimbabwe in relation to the pursuit by the state of paddock livestock management systems.

89 See, for instance, Lawrence (1988), pp. 61, 62.

90 Long & Van der Ploeg (1989), p. 238.

91 See also Benveniste (1982) and Bolhuis & Van der Ploeg (1985).

92 See also Bolhuis & Van der Ploeg (1985), p. 22.

93 It is for these two reasons that the sample survey was based on a certain distribution of farms situated in different ecological zones in the district and on a certain distribution of landholdings according to size (which was taken as a start to delineate farming strategies and styles). See Appendix I.

94 For a detailed account of African environments and resources, see Lewis & Berry (1988).

95 This does not imply that those regions are not incorporated in the national market economy. Several (forced) attempts were made to make them market cattle and/or to sell their labour power.

96 Berry (1984), p. 96.

97 Skocpol (1979), p. 29; Sharin (1982), p. 316 ff and Young (1982), pp. 72, 73. See also Poulantzas (1975) and Hoebink (1988).

98 See also Brett (1986), Alavi (1982), Leys (1976) and Saul (1975).

99 See Young (1982), p. 73, Skocpol (1979), p. 24 ff and Hoebink (1988), pp. 39, 40 and Poulantzas (1975, 1976). Long (1988) discusses the image of the state in three important schools of thought in agrarian sociology.

Recently the African state became the focus of much academic debate. Doornbos (1989) provides an overview of several academic debates. Doornbos tries to delineate the roots of the crisis of legitimacy in the African state: the state is out of balance and the state bureaucracy is not able to identify all elements in society, that is relationships are dichotomized and based on misunderstanding. Certain interests in society are over-represented while others are not represented at all. In addition to that, emerging conflicts (of an ethnic, gender and social nature) cripple state intervention. Bates (1980, 1982) and IDS-Bulletin (1986) examine the developmental and regulatory role of the state in African agriculture. Fatton (1988) challenges the view of the relative autonomy of the state. Forrest (1988) finds the African state neither relatively autonomous from society (the soft version) nor solely acting in favour of the ruling class (the hard version). Forrest (1987) contests the notion which perceives the state as a 'ruling class'. Ergas (1987) provides a 'modest contribution' to add to the corpus of knowledge by including an analysis of both theoretical and practical dimensions. Lonsdale (1981) and Bates (1983) analyse the African state in the transitional stage from the pre-colonial, colonial and

post-colonial period Both authors stress the evolution of social processes and organizations that have developed over time shaping state-society relationships Charney (1987) provides, based on Poulantzas (1975), an account of the African state in relation to the specific form of the neo-colonial state Chazan et al (1988) provide a forceful book on the nature on state-society relations and political systems in contemporary Africa

100 See Skocpol (1979), Jessop (1982) and Shanin (1982) for a critique

101 Burmeister (1987) provides a perfect example of state autonomy in agricultural research programmes in South Korea

102 Both Brett (1986) and Mars (1986) emphasize the need to pay attention to these aspects in the African context also

103 Arce & Long (1987), pp 5-8

104 Cowen (1983), p 203

105 Long & Van der Ploeg (1989), p 232

106 Byres (1977), p 260 See also Oasa (1987), Lawrence (1988) and Dittoh (1981)

107 See Cowen (1982b), p 260

108 This aspect of state involvement in the African context is for instance highlighted by Cliffe et al (1977)

109 See Hoebink's (1988) overview, p 40 and Skocpol (1979) Contemporary implies that the state had to build up its functions and power, and that the functions of the state change over time See, for instance, Lonsdale (1981) and chapter 2

110 See, for instance, Seddon (1986) on the bread riots in Northern Africa after the state lifted food subsidies which as requested by the World Bank and IMF in order to receive structural adjustment loans See also Chapter 7

111 See Hoebink (1988), pp 38 ff for an overview of Gramsci's contribution in the debate on the state, see also Skocpol (1979), pp 24 ff

112 Jessop (1983), p 102 and Charney (1987), p 49 Alternative strategies may be strategies which threaten the realization of the interests of the subordinated classes and groups in society They also may demanded embrace strategies which appear inconsistent with the interests of the ruling class An example of the first may be unfettered capitalist accumulation and concentration of the means of production Socialist development strategies are an example of the second

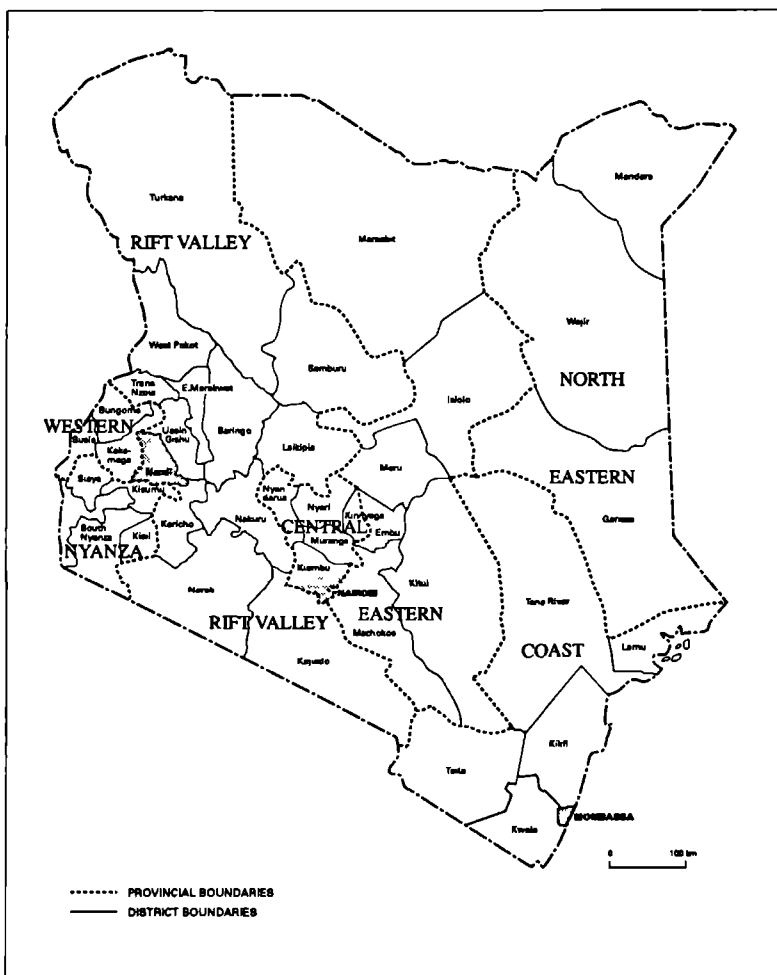
113 See Charney (1987) Clientelism is a personalized relationship between two individuals or groups belonging to different classes or class factions, based upon reciprocal exchange of goods and services Clientelist relations are frequently rationalized in terms of kinship, mutual obligations, redistribution and solidarity (Charney, 1987, p 52)

114 See also Holmquist & Barkan (1986)

115 Cowen (1982b), Cooper (1980), Jessop (1982, 1983) and Hoebink (1988) advocate this approach

116 Remotely can be interpreted in the political as well as in the geographical sense In Chapters 2, 7 and 8 these aspects will come forward clearly

MAP 1 PROVINCES AND DISTRICTS OF KENYA



CHAPTER 2

THE COLONIAL HISTORY OF COMMODITIZATION IN KENYA AND THE STATE

Introduction

Production of commodities, and in particular establishing the concrete conditions for its expansion, is a central theme throughout Kenya's socio-economic history. An examination of the expansion of commodity production in Kenya, as well as the socio-economic and structural development patterns underlying it, has necessarily to start from two perspectives.

In the first place, commodity production and exchange is not a phenomenon merely restricted to the period after colonial rule was established and the country became gradually incorporated in the international capitalist division of labour. Regionally specialized commodity production and exchange relations had already emerged in certain regions during the pre-colonial period.

In the second place, from the time of the incorporation of Kenya in the international capitalist division of labour, effectuated by the establishment of colonial rule and the building of a colonial state apparatus, commodity production and exchange increased considerably. New forms of commodity production and styles of farming emanated. Commodity production became increasingly capitalist and household commodity production. Both forms of production gradually included new commodities for the international and national market. The technological conditions of production changed profoundly as new implements and objects of labour were introduced and subsequently integrated into the agricultural production process.

An historical analysis is crucial to disclose the foundation for the contemporary features of Kenya's agrarian political economy. More particularly, an historical analysis discloses which social forces and institutions fostered the establishment of the conditions for commodity production.

Central to the examination of the process of commoditization in Kenya is an analysis of the various strategies of the actors involved with agricultural commodity production: several state institutions created during the colonial episode (and after independence), and several enterprises operating in the commerce, financial, industrial and agricultural sectors. Ownership of these enterprises involved Africans and foreigners. The state as a set of administrative, policing and military organizations headed, and more or less coordinated by, an executive authority, provides the instrument for a periodization of Kenya's history: its policies and practices, and its specific functions for facilitating commodity production in agriculture in particular.¹

This chapter is composed as follows. The first section examines the developments during the pre-colonial period. The following three sections deal with social and politico-economic developments since colonial state power was imposed in 1895 up to the transfer of state power in 1963.

2.1. Pre-colonial Kenya

The area currently known as Kenya underwent several changes before colonization. East-Africa and Kenya in particular was not a region characterized by static developments. On the contrary, massive migration and settlement as well as changes in production systems and in trade patterns feature in the social and economic developments of pre-colonial Kenya.²

One of the factors that strike anyone examining social, economic and cultural developments in Kenya during the 17th, 18th and 19th century is the incredible diversity which existed within that area. The multiplicity of ethnic groups and languages from different origins³ led to different ecological adaptations and, accordingly, different cultural and political institutions. Most economic, social and cultural developments took place in a restricted territory, in villages, ranging in size from a single family to several hundred people. Centralized political structures, as was the case in West Africa, emerged nowhere, and development was a localized process.⁴ The peoples may have varied in their methods of production and crops grown. What they had in common was that life was essentially organized around subsistence production. Each individual member of society or family only produced enough to feed themselves, with a small surplus to exchange for other basic needs and to ensure against the risk of crop failures. Through time, they had carefully adapted to the (new) local environment, and various forms of social relations and beliefs emerged. Some pastoralists and herders settled down and became agriculturalists; others remained herders or hunters and gatherers.

Hunting and gathering were the simplest economic activities. Production and reproduction were based on the gifts of nature. In the hunter-societies, the social organization was rather loose because there was no great need for continuity, except when hunting took place. A close kinship bond, as in agricultural-based societies, was absent. Herders (pastoralists), on the other hand, had different economic and social requirements. They needed access to extensive pastures to support production and reproduction. The availability of good pastures was limited, however. The conditions for production and reproduction were rather precarious. Drought and diseases devastating the herds were constant threats. To ensure against these, pastoralists divided their herds, slaughtered excess male animals for food and kept the female animals for production of milk. Barter trade and the temporary seeking of shelter among neighbouring farmers or hunter-gathers was one way to deal with the constant threat of nature. The other way was to split up in small groups clustering around available water pools without overtaxing the land or restricting their mobility.

Agriculturalists developed a more complex society. They were socially tied together by the need to obtain and maintain enough land (greatly in excess of their annual needs because of the slash and burn practice) to produce an adequate harvest year after year. This necessitated settlement in one place and the arrangement of social relations ensuring continuity. Farming requires more work to produce a given amount of food than among hunter-gathers. This implied, on the one hand, that the organization of a labour force was necessary. The elders played an enormously important role in this organization. On the other hand, because it entailed the employment of more labour, agriculturalists could produce higher yields per each unit of land. They

could support a much denser population. As populations grew, production increased through greater inputs of labour, manure and stock.

In the course of these centuries, the peoples of Kenya continued use-value production by farming and herding. Maize (introduced in Kenya by Portuguese merchants) gradually replaced sorghum and millet as a staple crop. More importantly, a certain specialization of production took place. Agricultural production gradually reached such stage of productivity that surpluses could be produced. This gave rise to trade relations between regions, ethnic groups and territorial organizations. Production of food and special products and trade were complementary: trade relations supplemented subsistence needs. The Kikuyu in Central Kenya exchanged surplus crops and crafts with other Kikuyu tribes. They traded foodstuffs for honey, wild animal skins and forest products with the Okiek; foodstuffs, pots, ironware and ivory for skins and cattle with the Maasai and the Kamba. The Luo in Western Kenya exchanged cattle against tools from the Samia blacksmiths. By exchanging fish, salt and cattle the Luo obtained grain from the Gussi.⁵ Most trade was conducted by local barter, periodically at special border markets. These markets were controlled by the elders of the lineage as they determined the general conditions for trade.⁶

For East, Central and Western Kenya a (necessarily) general picture can be painted. Kinship, residence and age were the main structures upon which social organization was based. In most areas the family was the basic economic unit; production was primarily use-value production and surpluses were traded. Land and cattle - the basic requirements for production and reproduction - were usually passed on from father to son. Production and reproduction were almost completely controlled by the elders. They determined who enjoyed usufruct of the land as well as who had the right to clear new land or to occupy new pastures. Marriage and inter-clan marriage was decided by the elders of a lineage group who also set the bride prices. The crucial means of existence could be increased in two ways - either by migration to new land or by obtaining women and cattle through raids and warfare.

Historical research conducted in Central and Western Kenya points out that development patterns during the 19th century increasingly generated differentiation of production relations. This was based on the formation of a ruling elite controlling the principal means of production.⁷ Migration to new land, raiding and looting and control over (long-distance) trade are considered as responsible for this process of differentiation. The tendency was for the means of production to become concentrated more and more in few hands, simultaneously excluding others from access. Increasing population pressure on the land because of demographic growth, subdivision by inheritance by sons of fathers' land and a general decrease in absolute terms of arable land, resulted in fragmentation of landholdings. The families who had no access to land were either forced to migrate to new and uncleared land (usually as labourers clearing land for others in return for cattle and a share of the new land) or to stay and work for others. It was not unusual for rich members of the clan, cultivating and controlling more land and cattle, to hire other labour within the clan.⁸ This development pattern was, as a rule, not generated by the employment of 'foreign' labour. Only some ethnic groups employed slave labour captured during wars with other groups.

During the pre-colonial period, socio-economic development patterns can therefore be characterized by a certain degree of commodity production and exchange relations. There was also a trend towards the concentration of mechanisms of control over the means of production (land, cattle and labour), the means of circulation (trade, markets) and reproduction (women). In other words, the development of unequal social conditions of production and reproduction in certain regions (Western and Central Kenya particularly) was on its way.

Throughout the 19th century, the patterns of development and accumulation of wealth remained based on a combination of use-value and exchange-value production, trade continued to encourage specialization of commodity production.

It is crucial to note that all this took place relatively undisturbed by external forces. This process of development was, however, increasingly blocked by intervention from abroad. Two processes with slightly different impacts on the pattern and nature of development can be held responsible. In the first place, the general effect of external trade-relations with Arabia, India and later with Europe, in the second place, incorporation within the expanding British Empire and colonization. The first process will be reviewed briefly here, the second aspect will be addressed in the following section.

Kenya, or rather that part of East Africa which is now Kenya, had participated in the Indian Ocean trade for at least two thousand years before the imposition of colonial rule. These trade relations led to the development of towns and a Swahili culture along the coast as well as to the eventual fall of these trading towns. The evolving trade relations with foreign nations became gradually based on appropriation of surplus without the development of backward linkages. The terms of trade between East Africa and Europe were unequal. Market-oriented trade in Kenya became increasingly important as East Africa responded to increased demand in India, China, Europe and America for African products. East Africa and Kenya supplied slaves and ivory in exchange for cotton and cloths (called *merikani*). The 'traditional' trade relations encouraged development and specialization of production activities, the 'new' forms of trade had the effect of absorbing surpluses rather than generating development.⁹ Zanzibar became the headquarters of this trade. Almost all European trading companies had a seat on that island. The Imperial British East Africa Company, established in 1888, became the company apparatus facilitating the trade. The surplus appropriated from East Africa by Zanzibari merchants represented only a fraction of the share extracted by European and American traders. The latter invested minimally in East Africa, maintaining only a single agent, the greater part of the profit was transferred to Europe and America where it was invested in industry and trade.¹⁰ With the imposition of colonial rule, the effect of the 'new' trade expanded increasingly from the coast to the interior.¹¹

2.2. The period 1895 to 1930

Profound changes in Kenyan patterns of development in general, and of accumulation, production and reproduction in particular, took place after colonial rule was established. Kenya became gradually incorporated in the international capitalist division of labour. European and white South African farmers were encouraged by the colonial administration to settle in Kenya.

From that time on, the colonial administration in cooperation with settlers and various sorts of foreign companies intervened in the economy, in production, trade and reproduction. The leading productive activities upon which development was founded in the 18th and 19th century were ignored in colonial development plans. This statement is significant for two reasons. Firstly, it must be considered as the preamble for commodity production under capitalist conditions in Kenya. Secondly, the implementation of these colonial development plans implied that the patterns of development, and the concentration of means of production in the hands of the pre-colonial elite during the preceding period were halted. Colonial settlement closed off further migration to new, uncleared and unoccupied land which was alienated and gazetted to become white settler land. The room for the pre-colonial elite to manoeuvre was from then on primarily restricted to the confined areas. Slave trade was forbidden (by the acceptance of the Universal Anti-Slavery Act) and raiding and looting was prevented by military pacification campaigns.

In the year 1895 Kenya became a British Protectorate and later, in 1920, a Crown Colony.¹² The colonial administration, was in the early days primarily interested in building an apparatus which could implement measures to establish favourable conditions for white settler and plantation production and to link Uganda with the world market. Uganda more than Kenya, was considered as a rich and productive area awaiting British exploration. When the conditions for the exploitation of Uganda's natural resources appeared less favourable¹³ and the infrastructural measures had already effected (such as the costly construction of the Uganda Railway from Mombasa to Kisumu on the shores of Lake Victoria), the British state decided to make the best of the opportunities existing in Kenya. In addition, the administration emphasized that indigenous agriculture could not be relied on as the main source of increased trade and output. The administration, therefore, viewed the encouragement of plantation agriculture and the settlement (on a greater scale than initially anticipated) white farmers in Kenya as a serious alternative.¹⁴ Plantation companies and European as well as white South-African and Rhodesian farmers settled in Kenya from 1900 onwards in order to grow crops which would help finance the Uganda railway.¹⁵

Crucial to the understanding of the politico-economic developments in this and the following periods is that the colonial administration was not a monolithic apparatus. It represented, in particular during the interwar years (between World War I and II), a condensation of several interest groups in Kenya. Some of the interests were 'situated' outside the colony in the metropolis, and others within the colony itself. The administration was compelled to operate in several distinct spheres: it connected the metropolis to the colony at the same time as it was mediating between internal social forces.¹⁶ This is apparent on two closely related levels.

In the first place, colonial state policy was concerned with maintaining a careful balance between various routes of accumulation. On the one hand, from the beginning the state favoured foreign estate companies for setting up agricultural production for the metropolitan market, and foreign merchant companies in its efforts to obtain import and export trade opportunities in the colony. On the other hand, the colonial administration strongly supported the development of a settler economy which would be economically viable. The

colonial state apparatuses encouraged, at the same time, the growth by Africans of economic crops which could not threaten the settler economy.

In the second place, the concrete political setting of the colonial administration made it increasingly difficult to mediate between all these external and internal interest groups and their different development strategies. Foreign plantation companies and large settler farmers, represented the dominant political force during the early period of colonial rule. For an understanding of colonial policies in the early days it is crucial to note the structural difference between foreign estate capital and the large white settler farmers. The large white settler farmers' interests lay in Kenya, and the settler community constituted a group whose interests were bound up with internal accumulation. Their intention was to establish control over the means of production and exchange within Kenya. In the case of plantation companies which came to Kenya to produce (and in many cases also to process) commodities for the British and world market, ownership and control lay outside of the country.¹⁷ Their interests were primarily indirectly articulated by the British state and imposed on the colonial administration. The white settlers could - by manoeuvring themselves into strategic administrative and policing positions - emerge as the dominant political force within the colonial administration. Large settlers, such as Lord Delamare - a settler baron with large tracts of land and holding large shares in local agro-industries, and Captain Grogan - a large timber concessionaire and property speculator with various shareholdings in other companies, were prominent members of a number of committees and boards, responsible for policy-making in the colony.¹⁸ White settler politics had been organised around local producer associations. The Kenya Farmers Association (KFA) was the largest association protecting settlers interests.¹⁹

The official colonial doctrine for economic development in Kenya was to establish a dual agricultural system which in theory safeguarded indigenous African and British interests. The result in practice of the doctrine was the development of a white settler economy and the facilitating of foreign estate production and import/export trade, simultaneously blocking both the development of commodity production in the African Reserves and the expansion of the wide spread development of commodity relations in these areas which would be of interest for merchants, banks and manufacturers of industrial products.

The colonial state employed several policies to support settler and estate agriculture. One of the key functions of the administration from the early period of European settlement had been to ensure land and labour supply to the estates and settler farms. Land, and particularly private land ownership, and labour represented crucial preconditions for the plantation companies and settlers to explore the natural resources of Kenya. The first measures to implement a land policy were taken in 1897 by the High Commissioner of the East-African Protectorate. The High Commissioner was mandated to grant and sell land titles to white settlers and plantation companies.²⁰ As a result of settler pressure, the competence of the colonial administration was extended widely. Several Land Acts and Land Ordinances were enforced by the administration to claim 'unoccupied' land (the so-called Crown Lands) for white settlement and plantation purposes. This implied that large tracts of land were alienated from the African population; the alienated land came to be

known as the White Highlands and the Scheduled Areas. African settlement was restricted to the Non-Scheduled Areas or the Reserves.

As the essential preconditions for agricultural commodity production were established, the influx of white settlers and the number of plantation and trading companies increased with it. Around 1920, the European community in Kenya numbered approx. 20,000 people, of which 1,200 were farmers 'occupying' 1.25 million hectares of land. By 1953 approx. 4,000 settlers 'occupied' about 3 million hectares.²¹ The settlers embarked upon export agriculture. Coffee and sisal were introduced on these farms, followed by wheat, maize and tea. Livestock too became an important economic activity.

Foreign estate companies were attracted to invest in Kenya from the early 1910s to produce mainly wattle, tobacco, tea, meat, coffee and sisal for the international market. Land and labour were supplied for by the colonial state. The companies established plantations as well as processing plants. The plants were, in all cases, preceded by a trading branch through which the firms exported primary commodities. Processing industries were usually set up in response to conditions of international competition in that particular commodity. Within this framework of favourable local production conditions and international competition, British American Tobacco, Brooke Bond, Liebig, the Anglo-French Sisal Company, Socinaf, James Finlay, Forestal Land & Timber decided to invest in Kenya.²²

Several labour acts were implemented to empower the colonial state to regulate and control the movement of labour. Both the settlers and the administration were determined to force the Africans into the labour market. The formation of the Department of Native Affairs signified the administration's attempt to deal with the supply of labour to settler farms and plantations. Before 1925, by means of taxation and forced labour, Africans were forced either to sell their labour power to the plantations and settler farms or to raise cash crops for the market. The alienation of land from the Africans supplied the necessary 'free' labour for the settlers. Those with no land had no other option but to sell their labour power or to stay as squatters (termed 'resident labour') on the settler farms. In particular, the squatter families served as a cheap labour force for the settlers. The Resident Native Ordinance of 1918 was proclaimed to reduce the opportunity to escape from work on settler farms. The ordinance decreed that a squatter could not remain on settler land unless he had contracted to work for the settler owner for 180 days in the year. In addition the Native Registration Ordinance was enacted to control absolutely the supply of labour. The ordinance required all Africans to carry a kipande, a labour record card showing periods of employment and unemployment. The total effect of these interventions by the colonial administration in favour of the white settlers and plantation companies was that in the mid 1920s around 40 % of all African males worked on European farms.²³ In chapter 5 we will deal with this matter in greater detail with regard to Nandi District.

White settler dominance was also advanced by the colonial administration in many other ways. Firstly, Africans and other non-European population groups were prohibited from cultivating high-value cash crops for the (world) market. African agriculture was intended to be complementary to, but never competitive with, settler agriculture.²⁴ Policies to promote commodity production by Africans was limited to the subsistence sector, which could

subsidize estate agriculture by providing food stuffs. As a result of that policy, the production of commodities with high exchange value (tea, coffee) continued to be dominated by white settlers and foreign estate producers until the 1950s. In addition to this kind of protection, the administration regulated African livestock production by imposing almost permanent quarantines on the movement and sales of African stock and by prohibiting Africans from owning graded dairy cattle.²⁵ This measure was largely implemented to prevent the spread of diseases to livestock on European-owned farms.

Secondly, the settlers managed to control agricultural research, to gain privileged access to extension services and agricultural credit and exerted pressure on the administration to make sure that fiscal, transport and freight policies favoured settler agriculture.²⁶ The revenue of the colonial state was used to provide an infrastructure to support the settler economy.

Control over state power was essential for the white settlers. Although they owned the best agricultural land, they lacked the knowledge, funds and the labour force to cultivate the land. In the beginning, the white settlers were still experimenting in the management of a viable farming system and their position was precarious.²⁷ Control over the allocation of state resources on their behalf was the mainstay of KFA's political strategy.

White settler agriculture, as will be highlighted later, generated many conflicts. It generated an embryonic conflict with British as well as indigenous African interests in the competition for labour and land. White settler agriculture appeared to be a conflicting agricultural system. The paradox of white settler agriculture was created by the fact that in the beginning the colonial state apparatus was required to force Africans into the labour market and to restrict African commercial agriculture, while it relied heavily in the early period on the revenue raised from African-grown cash crops and taxes contributed by the African population. In 1913, about three-quarters of the country's export earnings originated from African agriculture (mainly hides and skins, maize and sesame seed).²⁸ African agriculture supported much of the administrative effort being largely devoted to the expansion of the settlers, their direct competitors for land and labour. Despite this, the white settlers supported by the administration seized the most fertile areas of Kenya, the so-called White Highlands, and transformed the non-occupied areas into labour reserve areas, and little attention was paid to development in these areas in order to secure the flow of African labour to white settler farms.

In spite of the enormous support for white settler and estate agriculture, colonial state officials stationed in the Reserves, in Nyanza and Kikuyu land in particular, encouraged cash crop production by Africans. The fact that some sections of the colonial administration were actively engaged in encouraging agricultural development in the Reserves is an indication that the colonial state was not a monolithic apparatus and that the colonial administration was capable in perceiving interests other than those of settlers. Almost everything was tried, according to Kitching (1980), to introduce industrial crops (such as sesame in Nyanza) and improved varieties of food crops (such as the Hickory King maize and other varieties originating from South Africa which were meant to replace the yellow maize variety). The purpose of this innovation was, however, simply to generate cash income for the African to pay tax in money instead of paying it in livestock, of which the administration then had to dispose.

Opportunities for raising crops for the market were actively integrated in the farming strategies of the African producers.²⁹ Export markets as well as the settler farms, plantations and the growing Nairobi-market provided the outlets for surplus production. Taxation levied in cash was the impetus for the commercialization of agriculture and the major reason for permanent and migratory wage-labour on settler farms and plantations or in government services. These well known factors created some of the social conditions for commodity production by Africans, although it was limited to certain regions (notably Kikuyu land).

The social and economic development in the Reserves was primarily based on subsistence agriculture and livestock in combination with some cash cropping (mostly food crops) which was expanding rapidly in acreage. However, these developments could not endanger settler agriculture nor the regular flow of migrant labour to the settler farms and estates. The central government paid attention to the improvement and introduction of new cultivars solely to prevent famine in the African reserves. In the period before 1930 there was little or no coordinated assistance from the colonial state. The general picture is that cultivation techniques and husbandry methods of African agriculture remained the same, despite increased access to cash through commercialization of production.³⁰ The period prior to the 1920s was a period of relative stagnation for African agriculture. Between 1922 and 1938, there was no increase in the value of commodities from the Reserves; although the quantity certainly increased. Hides and skins, live animals, maize, cotton, groundnuts, sim sim, wattle and copra were the main products of the African producers. It has been estimated that African subsistence production in 1929 accounted for 60 % of Kenya Gross National Product (GNP). This represented an uncomfortable reality for the settlers because African farmers were indirectly subsidizing their production.³¹ This fiscal base of the colonial state and Kenya's future as 'The White Man's Country' was put in danger by future developments.

2.3. The Great Depression and its aftermath

The international depression of the thirties, when the level of almost all commodities produced by settler farmers was extremely low and settler agricultural contracted severely, gave rise to profound changes in colonial Kenya and led to a gradual change in the attitude of the colonial state towards African agriculture. An interplay of several political and economic factors and conflicts were at work contributing to, and at the same time explaining, the gradual change in colonial policies. The explanation of the events centres around an analysis of the weakening position of white settler agriculture and the conflicts, generated by settler dominance, with competing interests inside the colony. Crucial for the analysis is, on the one hand, the position of the administration and international capitalist enterprises vis-à-vis white settler agriculture and African agriculture. On the other hand, the political and economic developments taking place among the African population, and within African agriculture in particular, play an important role.

Firstly, a review will be presented of the developments in African agriculture centred on the commercialization of agricultural production in the Reserves and of the politico-economic developments in which the colonial

administration played a crucial role. Then white settler agriculture, and particularly the changing attitude of the administration, will be discussed.

2.3.1. Politico-economic developments in the Reserves

Generally it is assumed that the adjustment of the African population to the demands made by the colonial administration and estate agriculture went rather smoothly. African agriculture was less directly hit by the Depression than the settler farmers. Redistribution and intensification of labour time, quantitatively as well as qualitatively, created new patterns of production and it raised production levels. The marked increase in productivity allowed Africans cultivating the land to compensate for the transfer of labour power to other forms of production (settler farms, plantations) and to government service.³² Africans responded quickly to the new opportunities. Taking up wage-labour employment by outward migration was among one of the new opportunities. Around the mid 1920s, however, labour migration caused a shortage of labour, and particularly of male labour in the Reserves. It is estimated for that period that the percentages of male labour migration from the different districts to areas where there was a demand for labour was extremely high. It reached between 50 % and 62 % in Kiambu and over 30 % for many other districts.³³ Cowen's research revealed that labour continued to flow between the Reserves and the White Highlands, and that, throughout the 1920s and 1930s, wage levels did not differ between the Reserves and the Highlands.³⁴

Cowen's and Kitching's analysis of the developments in African agriculture during this period is interesting because of their highlighting of two crucial trends. In the first place, both accentuate the trend towards commercialization of agricultural production despite the existing restrictions on African commodity production. More importantly, the early developments towards commercialization of production in the Reserves did not merely result from external pressure or action: market forces were operating upon the African population. A major impetus behind cash crop production was the 'hunger for cash' of the African population. Not only was this to meet the annual hut and poll tax burden, but cash was increasingly viewed as a means to acquire newly introduced western consumption items and to gain access to formal education.³⁵ Money was obtained by a combination of wage-labour employment and labour migration, involvement in local trade and/or commercialization of agricultural production. Cowen (1981a, 1983) in particular underlines, however, that adverse market forces were also at work leading towards increased commercialization of agricultural production in the Reserves. At least in the Central Province, wage levels could not guarantee the reproduction of the worker's household. In the depression years when settler labour demand and wages fell dramatically, workers attempted to commercialize their production activities in order to compensate for the reduction in wages. These adverse market forces caused more commercialization and more integration into the market with little or no extra-economic coercion and resistance. Increasingly workers-peasants participated in selling produce, replacing wages from work on estates and thereby avoiding wage employment.³⁶

In the second place, Kitching and Cowen record that some sectors of the peasantry in Central Province, notably the so-called 'progressive' farmers and

'big men' (the 'watu wa mission' or 'athomi')³⁷, were effectively expanding agricultural production through the accumulation of land and livestock and were gaining access to improved labour instruments and objects of labour (new dairy cattle, tea) in order to raise productivity (i.e. capitalization). The scale of indigenous accumulation was, however, geographically restricted to the Reserves as a result of racial prohibitions and parallel competition with the settlers for land and labour. It was also economically limited because small-scale peasant household production was protected and conserved as a source of direct food consumption. Nevertheless, accumulation was taking place and was increasingly founded upon money obtained from the sale of commodities and wages from salaried positions and trade. That money was invested in agriculture, to purchase land, livestock, implements and labour as well as in other economic sectors.³⁸ This was a capitalist form of commodity production based on the employment of wage-labour. In this form of production, commercialization was increasingly accompanied by capitalization. This was not the case with small-scale peasant household commodity production in the rest of the Reserves.

The trend towards commercialization and capitalization in African agriculture leads Heyer (1981) to suggest that African agriculture must have benefitted from the development of European agriculture.³⁹ It seems, however, that Central Province benefitted the most from the contacts with European agriculture, directly through employment on settler farms and plantations. Government research and extension services played a much less important role. It was, therefore, in Central Province that the growth of output and income was most impressive, despite that outward migration of labour being among the highest in the country. The Nairobi market and nearby plantations provided a buoyant market for the Kikuyu producers. In other African areas neighbouring European farming areas, such as North Nyanza, parts of Machakos, Nandi and Kericho, population pressure on the land was less severe and access to a market less easy than in Central Province. The patterns and pace of development were very different from that in Central Province. These regions developed maize and livestock production through the introduction of ploughs which facilitated a significant growth of output in combination with high rates of outward labour migration. It was in the areas further away from European farms that agricultural development appeared less impressive during this period. Within these areas belonging to the traditional labour reserves regions (Central Nyanza, Maragoli area), economic development was marked by a combination of high outward labour migration without significant expansion of agricultural production and productivity.⁴⁰ There were also the so-called remote areas, hardly incorporated in the commodity economy. In some of these areas, particularly the pastoral regions, development was severely hampered by restrictions on cattle movement, livestock trade and land alienation without adequate compensation.⁴¹

Despite the colonial administration's priority for sustaining settler agriculture and political supremacy, various state bodies initiated developments counter to settler interests in other sectors. By implementing a native rule policy adopted in the mid 1920s and clearly aiming for co-optation of the indigenous and emerging educated elite, the colonial administration also created opportunities for some Africans to occupy political positions within the colonial state apparatus. The state established the Local Native

Councils (LNCs) representing the colonial government's first attempt to provide an administrative agency through which a certain amount of African development could be secured without the resources for such development having to be drawn from central government revenue, most of which was expended in the settler areas. African chiefs and headmen were appointed by the administration as tax collectors and they had the additional functions of rallying for support and organizing labour gangs for public works (road construction in particular) within the Reserves. To secure central government control of the activities of the LNCs, District Officers acted as *ex-officio* chairmen of the Councils with an absolute power of veto.⁴²

The role of the LNCs was crucial in several aspects. First of all it was crucial in guiding the energies of the 'educated' and 'progressive' Africans emerging from the mission schools and working together with African associations (such as the Kikuyu Central Association and the Kavirondo Taxpayers Welfare Association). The LNCs in particular did much to expand the very limited educational facilities available to Africans. These mission boys (or 'watu wa mission') were seen by the district officers as the progressive forces in the districts and were taking up, also encouraged by the African population, positions within the LNCs. The LNCs encouraged a wide variety of progressive activities in the Reserves, among which, economic enterprise and agricultural and pastoral improvements. These included the construction of maize mills, small-scale dairies, drying sheds for hides and skins, demonstration plots and seed farms for the improvement of agriculture, the hire of veterinary extension personnel and the provision of loans to prospective businessmen. There is also evidence, according to Kitching, that the LNC extended loans for the building of maize mills, shops, hide sheds and the purchases of lorries. The precise mechanics of these processes are not known; in particular it is not known how these projects, once completed, were managed. Kitching (1980) argues, however, that there is evidence of projects funded by LNCs being turned over to private ownership and control. At any rate the Councils were an important source both of contracts and credits for African businessmen. There was a considerable degree of overlap between their membership and the first group of African entrepreneurs in the Reserves. Among the first group of businessmen were the government appointed chiefs and headmen and the 'watu wa mission'.⁴³

This process had strategic consequences and implications. At least some of the government-appointed headmen and chiefs were manoeuvred into a political and economic position which enabled them to appropriate surplus from their subjects by means of unregulated taxes and fines and to further accumulate land and livestock within the Reserves by engaging in costly litigation.⁴⁴ Out of this ruling elite, of which at least some were members of the pre-colonial elite, a group of indigenous accumulators of capital and land began to emerge in the Reserves by the late 1920s and these gradually became involved in capitalist commodity production and increasingly engaged in competition with settlers and foreign estates over control of land, labour and markets.

In the course of this process, the traditional land owning elite and their political authority in particular were, however, soon outstripped by a new indigenous class formed from the educated strata of the African population: the mission boys. They represent a different group of people whose economic

and political basis can be traced back to the sphere of commerce and salaried positions based on education within the state apparatus. This new 'educated' class consisted mainly of salaried workers. Wages served as a means to set up trading companies. In addition as pointed out before, loans from the LNCs were also an important source of credit for engagement in local business. Members of this new 'educated' class became the leaders of the various African associations based on tribal or ethnic organization and increasingly nationalist in their political orientation and activities.

Various researchers such as Cowen, Leys, Swanson and Kitching, point repeatedly to the importance of 'straddling'. It is a major component in the both process of class formation in and outside the Reserves and the increasing differentiation among African households. For Cowen, straddling denotes 'the ability to garner revenue from state and other employment and use that revenue in the pursuit of private enterprise, (it) is a historical form through which capitalist transformation has occurred in Kenya'.⁴⁵ It is the means by which both indigenous capitalists and wage labourers emerged.

An understanding of straddling is crucial for the understanding of future politico-economic developments in Kenya. Cowen: 'In the case of capital, revenue out of wage and salaried employment provided the means for setting accumulation in motion, in the case of labour, revenue from family and land holdings supplemented wages from wage employment to satisfy "the conveniences of life"'.⁴⁶

The opportunity to straddle increased steadily from the establishment of the colonial state. An African wage labour force was emerging from the onset of colonialism and was engaged in Government service (teaching, clerking, service, transport, road construction), undertaking agricultural production on land alienated to white settlers (as resident squatters or as contract workers who got mostly low-paid jobs) and in African trade and business. Government jobs in particular were new occupations to the Africans requiring some formal or informal education. Some of these government positions were relatively highly paid.⁴⁷

The importance of straddling for the new, indigenous class during the 1930s can only be understood in the colonial context. It was a strategy induced by the politico-economic setting of colonial Kenya. In addition, the educated sections of the African population were stimulated by the colonial administration to take this particular route.⁴⁸ They increasingly shifted from the old forms of primitive accumulation (of land and livestock) to straddling wage income and commerce. Two reasons are immediately apparent. The opportunities to accumulate capital in agriculture were severely restricted by, on the one hand, the white settler monopoly over land, labour and the production of high value crops, and, on the other hand, by foreign estates involvement in plantation production as well as in commodity production schemes permitting the African smallholder to produce high value crops (we return to this particular issue later on). In other words, the white settlers and foreign estates deprived the indigenous capitalist farmers of the means to enlarge land holdings and control over the African labour force. For some of them, commerce and wage-labour represented an increasingly - and perhaps the only - viable option to enable them to create conditions to accumulate capital.⁴⁹

Thus during the 1930s we witness the gradual emergence of a class of wealthy African capitalist farmers, traders and those occupying salaried positions within the administration. These Africans were about to challenge colonial domination in general and white settler dominance in particular. The white settlers, above all, represented a countervailing force for the indigenous capitalist farmers, inhibiting their accumulation of capital. A further unfolding of their accumulation strategy in agriculture would imply at least a removal of settler interests groups from the apex of colonial state power. For the new, 'educated' sectors, whose accumulation was confined to the circulation sphere where, however, confronted with severe competition from large and small-scale Asian merchant companies. This implied that the struggle against Asian merchants, predominant in circulation⁵⁰, became increasingly nationalistic. Semi-political pressure groups (such as the Kikuyu Central Association (KCA) and the Luo Thrift Union) were formed during this period to articulate their aspirations and to remove existing racial restrictions on the participation of Africans in trade. Pressure was exerted on the administration to channel state finance to the assistance (training, credit) of African traders. Although this demand had existed since the 1930s and had been effectuated through the LNCs, the schemes to assist African traders on a larger scale were not implemented until after World War II.⁵¹

2.3.2. White settler agriculture during the Great Depression and after

Before 1930 nearly all settler production of food and other crops (e.g. coffee) found its way to export markets. With the slump in world prices, income on settler farms fell below production costs. Many settlers went bankrupt and acreages under wheat and maize (i.e. crops most affected by falling prices) decreased sharply. When settler agriculture contracted many farms were abandoned and the amount of underdeveloped white settler land increased dramatically. The financial institutions supporting settler agriculture with capital, such as the Land Bank and foreign commercial banks, seemed to have gained considerable control over the level of development on white-owned estates.⁵² The settler demand for labour fell and Africans found it increasingly difficult to meet their tax obligations. Moreover, as stressed before, the fiscal base of the colonial state, which relied heavily on taxes from Africans, was in jeopardy. Action was required to save the inefficient and bankrupt settler economy.

The colonial state responded to this situation in two ways, with important consequences for settler and African agriculture. The administration recognized the problem of unoccupied and abandoned white-owned land but decided not to force them to develop their land or to return it to the Crown. That antagonisms between settlers and the colonial state should be averted was probably the reason for this decision. Instead, a marketing strategy was designed to give settlers a monopoly of the domestic food market, notably of maize - organized through the KFA. At the same time it was hoped to divert increased quantities of African production to export markets. When the first element of the strategy appeared to be a complete failure, this arrangement was withdrawn in 1942 and was soon followed by the creation of the Maize and Produce Board.⁵³ In addition, the colonial administration decided to subsidize white settler agriculture. A market with regulated prices was created and this gave the settlers a profit over production costs.⁵⁴

At any rate, it quickly became clear that the costs of this operation would soon be beyond a government whose revenue was declining rapidly. It was assumed that African producers with much lower production costs, would be able to carry export prices at less than the depression level and still show a profit. Expansion of African production and its direction on to export markets was also thought likely to have a double pay-off. African export commodity production would increase export earnings and foreign exchange reserves which could be used as a foundation for further measures to rescue settler agriculture. Simultaneously, increased incomes for African producers would allow settlers to sell them food at higher prices. This was an important prologue to a total reversal of pre-1930 policies. Reviving or rather supporting, African production gradually became the leitmotif of the colonial state.⁵⁵ Anderson & Throup (1985) maintain that the future of the colonial state was at stake and the survival of the state was ultimately more important than the protection of inefficient settler farmers who anyway only comprised one quarter of the European community in Kenya.⁵⁶

This situation together with the increasing commercialization of agricultural production taking place in African agriculture, the widespread occurrence of soil erosion and the famines that struck the African Reserves in 1929, 1930 and 1934 pressed the state to pay more attention to the development of these areas. It forced the state to direct more funds and manpower into the improvement of African agriculture. Plans were drawn up by the Department of Agriculture to streamline African agriculture, to expand existing crops and to introduce new crops, plant-selection and cross-breeding programmes were initiated and designed to increase yields. In addition, programmes were designed to prevent soil erosion which was rampant in most of the Reserves. Improved varieties of maize, cotton and other crops have been promoted as cash crops since then. The adoption by the African farmer of white maize (Zea Mays which replaced the Hickory King variety) was surprisingly fast and, more importantly, African agriculture appeared to be highly productive and competitive to white settler production. For instance, African-produced maize for the internal market appeared more profitable than the export maize produced by white settlers. This led the administration to discover the comparative cost advantages of African cash crop production.⁵⁷ In the course of this process, the colonial administration started to undertake developments contrary to white settler interests.⁵⁸ It commenced by allowing Africans to produce, at first on a small scale, and after World War II on a massive scale, cash crops (notably coffee and tobacco) which were formerly prohibited as a result of settler pressure. Pilot coffee schemes were initiated in Central Province and in Kisumu district of Nyanza Province. In addition, the Africans were soon allowed to keep graded cattle.

The gradual reversal of the colonial state's agricultural policy contributed to a considerable expansion of cropped area in colonial Kenya, despite the depression and years of locusts and drought. The expansion of the cropped area started from the early 1930s, particularly in Kikuyu-land, Nyanza, Kisumu, Meru-Embu region, Machakos, Kipsigis area, Nandi and the Coast province. The expansion was partly a continuation of earlier trends and partly based on the outbreak of World War II⁵⁹, but from this on it was profoundly and increasingly affected by the intervention of the colonial administration into the commoditization of agriculture.

The intervention took the form of raising the productivity of labour by ensuring the spread of improved instruments of labour, and, probably more importantly in this period, by improving the objects of labour. In addition, new crops were introduced (coffee, tea,) and others were expanded (cotton and wattle). The prerequisites for new styles and forms of commodity production and the expansion of commodity relations were there: production for the market which stimulated the expansion of the monetary economy and also the gradual incorporation of 'western' consumption items (clothes) and productive items (i.e. plant technology, jembes and ploughs) which had to be imported from abroad and could not be made locally.⁶⁰ The colonial state's intention, and that of the agricultural population and foreign companies, to raise productivity on the farm and to extend the economy beyond subsistence levels became clear. The Ten Year Plan commencing in 1946, for instance, acknowledged that the African was becoming accustomed to satisfying his needs on a cash basis and emphasized henceforth that 'he' should be allowed to participate in commodity production.

'He must be in a position to obtain some of his returns in the form of cash. It has been argued on the one hand that such crops should not be encouraged because of the possible effects on labour supplies and on the other hand that they should be increased in order to advance the standard of living. (...) The argument on which policy must be based is the effect on the land and the people'.⁶¹

These and other policy changes were later formalized in the much-discussed agrarian reforms in the 1950s envisaged in the Swynnerton Plan (see 2.4.).

The continuing reversal in colonial state policy cannot solely be attributed to the changing attitude of the colonial administration towards African agriculture. It is a two-way recognition of the fact that a removal of state-imposed restrictions on African production was needed for a full-scale expansion of commodity production and relations. Some, but not all, sectors of the administration⁶² were willing to expand African agriculture because they saw its productive potential; consequently, for them there was less need to sustain settler agriculture as the only viable agricultural system.⁶³ Parallel to the critical economic position of the white settlers, their political influence was declining. This implied that the settler cause could no longer be defended as strongly as before.⁶⁴ But on the other hand, the colonial state was increasingly confronted with demands from certain sectors of the African population to reverse its policies, i.e. by the 'big' men who felt the frustration of the settler presence the most. Those who were most conscious of the lack of opportunity were precisely the embryo-indigenous capitalists who had made the most of what opportunities did exist. And it was in response to their anger - and in recognition of their productive potential - that the colonial administration embarked on its post-war agrarian reforms. In other words, the Kenyan producers started to push for the right to commercialize agricultural production on a much wider scale.⁶⁵

The position of the white settlers was, however, also assailed by foreign interests, i.e. estate, finance, merchant and industrial companies. Although foreign estates benefitted likewise from the ensured labour supply, they developed a different accumulation strategy. Foreign estates cared little about who produced the commodities for export and processing. They were willing

to develop a sector of peasant production as long as they could retain control and supervision over such production and over distribution and processing of that particular commodity Estate companies - such as British American Tobacco (in tobacco) and Forestal, Land & Timber (in wattle)⁶⁶ - started to experiment with small-scale peasant production and to allow Africans to produce cash crops provided that the company supervised production. The exclusion of Africans from access to fertile land and capital hampered the expansion of small-scale commodity production under the aegis of international agro-firms. Rather similar arguments were used by merchant and finance capital to challenge white settler dominance. For merchant companies and banks, the ban on private land ownership by Africans and the prohibition on growing high-value crops frustrated the development of an internal market for international goods and restricted the demand for capital in the form of credit.⁶⁷ Merchant companies such as British American Tobacco (BAT) commenced to operate through African traders to expand trade into the Reserves Estate, merchant and finance companies and institutions were willing as the African population to promote African participation in trade and agriculture and to raise productivity in all sectors of agriculture. The immediate meaning of this strategy was not only that in the eyes of foreign enterprises the restrictions on African commodity production needed to be removed and that the settlers had to give up their privileged position. The strategy of international capital to promote commodity production by small-scale producers also prevented the further concentration of labour and land in indigenous capitalist production enterprises. This constriction in its turn aggravated the demand by the indigenous capitalists for the acquisition of land in the White Highlands and/or represented a push for members of this class to find alternative ways to accumulate capital. Straddling, as already stressed earlier, between agricultural production and wage-employment and trade was a commonly applied strategy.

2.4. Post-war policy reforms and the transfer of state power

It became clear to the colonial administration that, in the wake of the Second World War and its aftermath, white settler dominance could no longer be sustained. Pressure exercised by foreign capitalist interest groups and the indigenous capitalists, articulated in a variety of ways and on different occasions, on the administration to revise its policies coincided with a considerable build-up of political unrest in the colony after the ending of World War II. New political organizations were formed to channel and to articulate popular discontent. Growing incidences of landlessness, unemployment, low wages, accelerating population growth resulting in increased pressure on the land and declining soil fertility in the Reserves, were part of the popular discontent. Trade unions such as the African Workers Union (AWU) organizing the growing urban wage-labour force emerged to guide the widespread call for radical reforms in the colony. The formation of the Kenya African Union (KAU) in 1947, replacing the KCA which had been banned in 1940 as a subversive organization, was aimed at securing constitutional reforms. KAU was a more moderate mass political organization led by the educated and landed sections of the African population (such as Kenyatta), while the leaders of the AWU were relatively uneducated men, close to the ordinary workers. By 1950, widespread unemployment and landlessness

among a large Kikuyu population lent impetus to more militant and violent actions. Militant groups of the KAU came to the forefront resulting in the Mau Mau rebellion and in the proclamation of the Emergency in 1952. The Mau Mau movement, fighting a guerrilla war against British troops which were called in to restore law and order, was more than just a struggle against colonialism and white settlers for land which was alienated to the white community. Mau Mau was also directed against the landed Kikuyu 'loyalist' within the Reserve. It was not an isolated movement as it received much political and material support from grass-root organizations of African town dwellers in Nairobi. The squatters on the settler farms in the White Highlands who belonged to the most degraded and lowest paid African labour force, and particularly the Kikuyu squatters and the Nairobi dwellers, finally supplied the majority of the Mau Mau freedom fighters. That they too joined the ranks of the Mau Mau is a reflection of impoverishment and frustration of the lowest paid and least secure sections of the African population.⁶⁸

The Mau Mau rebellion accelerated the beginning of new policy thinking in the colony. More importantly, perhaps, with the advent of Mau Mau when British troops intervened directly to rescue the colony, the British state was given the opportunity to over-rule settler interests and displace their political authority over colonial affairs. The British state moved itself in a political position of strength to decide whether to support the settlers militarily or to find a long term solution and to draw Africans into the economic and political structure of the country.⁶⁹ The shift in state policy was accelerated by the need for a long-term solution rather than the maintenance of colonial order in Kenya in favour of the settler community. It was hoped in this way to channel and counter the political unrest in the colony, accelerated the shift in state policy. The root cause of Mau Mau, detected by the administration itself as the loss of Kenyan land to Europeans, needed to be eliminated by economic and political reforms. This policy shift was most certainly welcomed by proponents of African agriculture within the colonial administration who clearly saw the need for another policy which they had already remotely and marginally practised. Far-reaching policy reforms were launched by the colonial administration launched with much vigour after World War II with the support of the British state and its reform-like sectors.

The adoption of the Swynnerton Plan of 1954 officially marked the definitive change in colonial state policy towards African participation in agriculture and mandated various development initiatives already implemented earlier.⁷⁰ The Plan is named after the deputy-director of Agriculture in the Agricultural Department and chairman of a commission installed by the colonial administration to research the opportunities for increased production in the African areas as well as to initiate policy measures. The Swynnerton Plan is a reflection of the struggle taking place within colonial Kenya. It is above all, a response by the colonial administration to the demands of Africans to commercialize their production, to allow them to grow high-value cash crops and to permit them to hold title deeds on land, finally removing the racial constraints over property ownership.

The technical details of the Swynnerton Plan will be dealt with in Chapter 3. Here we shall merely emphasize the political implications of the Plan.

The Plan contained a combination of various measures to increase commodity production by smallholders and subsequently to facilitate the

expansion of commodity relations in the rural areas.⁷¹ Restrictions on high-value cash crop production by Africans were thereafter lifted and, in congruence to Swynnerton's ideas, Africans were permitted to own freehold land. The corollary of the latter was that all land had to be registered.⁷² For that purpose, a programme of land consolidation and enclosure of new land was implemented.⁷³

The Swynnerton Plan is of central importance for an understanding of both the development of African agriculture in Kenya immediately after its implementation in the 1950s and for the contemporary features of Kenya's political economy. The meaning of the Plan stretches far beyond than simply allowing African producers to grow high-value crops and the establishment of a sophisticated, modern technico-administrative structure upon which commodity production for the international and national market could expand. The Swynnerton Plan proclaimed an agrarian revolution finally destroying all elements of previous colonial agricultural policies.

These post-war reforms had far reaching political consequences. The land tenure reform was intended to create a solid middle peasantry. The Swynnerton Plan is quite definite in this political intention. A middle peasantry would be invaluable as a buffer between the settler community and political trouble-makers demanding a general redistribution of land. As a counter-revolutionary measure, land reform in Central Province was used, during the Emergency years, essentially to reward the loyalists among the Kikuyu peasantry at the expense of the Mau Mau fighters and their supporters. As the security situation improved, land tenure reform was given a broader political objective, i.e. the creation of a stable social and political order. In order to achieve this, policy measures were taken, such as the pre-independence settlement schemes, to absorb the dispossessed peasantry since they could become a source of political unrest in the future. In this respect the land reform arrested a further concentration of land into plantations and estates owned by foreign companies or into the hands of the indigenous capitalist farmer class, simultaneously creating opportunities for commodity production by independent small-scale producers.

The policy reforms propelled various important politico-economic tendencies within Kenya. International developments and the quest by the African population for political and economic independence counterbalanced the possibility of maintaining colonial order in Kenya. From the late forties onward, i.e. before the reforms were effectuated in official policies, African participation in agricultural commodity production and trade rose significantly.⁷⁵ The relative economic success created a political consciousness among the indigenous capitalists whose accumulation routes did not fit into the object of colonialism.⁷⁶ They were no longer satisfied with the status quo, although colonialism permitted some enlargement of their accumulation base. In order to compete with settler and Asian merchant companies in agriculture and commerce respectively, they started to press the colonial state to remove the obstruction on further accumulation in these and other sectors of the economy. It became increasingly clear that political independence was necessary to remove the limitations placed by Asian merchants and the growing weight of international capitalist enterprises upon accumulation by Africans. Leys (1978) pointed out that this politico-economic struggle was

dominated by the 'modern', educated elements among indigenous capitalists instead of the older, 'primitive' element⁷⁷

The British state stimulated production in the colonies in order to contribute to the solution of the dollar shortage which developed after World War II. Additionally, World War II created a shortage in consumption items. This composite situation created both a conducive investment climate and the opportunity for investment in import substitution by settlers and Asians. The settlers in particular started to build up ancillary services in the agricultural sector. The drive towards import substitution widened the industrial base which formerly concentrated primarily on agricultural primary processing. The majority of the investments went into import substitution⁷⁸

An important immediate effect of the expansion of African commodity production in agriculture and commodity relations, and a direct impetus behind the formulation of the Swynnerton Plan and other plans, was that British as well as American companies were eager to invest in Kenya. British firms, in particular, tried to regain the position they had had in industry before World War II - a position which was lost during the war⁷⁹. After World War II, foreign investment increased sharply. More than a third of private shares in industry in 1958 were controlled by foreign industrial firms, and mainly international firms. The investment pattern was highly concentrated. Almost every branch of the economy was dominated by one or two firms⁸⁰.

International, and, more particularly a British post-war concern arose for an increasing supply of food and raw materials from sterling area sources. This interest was associated with a colonial desire to promote welfare through smallholder production in the countryside and resulted in the removal of racial and ethnic barriers against indigenous capital accumulation. The British state intervened directly, as stressed earlier, in colonial development affairs in Kenya. Just as military intervention was the form during Mau Mau and the Emergency period, so the main arm of the British state in supporting development in Kenya was now the Colonial Development Corporation (CDC), a Britain based finance agency. The CDC financed, for instance, the expansion of tea production by small-scale African producers. In addition, the CDC subsidized industrial production in Kenya until it became profitable and was hived off to British firms⁸¹.

After the war, the undermining of the monopolies and privileges of the settler community became the leitmotif of the colonial state, the British and American state as well of foreign enterprises. The developments in Kenya after World War II were thus shaped by an intermingling of internal and external forces, accelerating the process of independence for Kenya and the transfer of state power to an independent Kenyan government.

After the Emergency terminated and the Mau Mau rebellion was defeated by British troops, the colonial administration removed the ban on African political organizations. The aforementioned economic reforms were implemented, while at the political level the colonial authorities began to negotiate with the modern, educated elements of the African population. Among these were prominent persons, such as Jomo Kenyatta and Daniel arap Moi, who had a lengthy history of engaging in representative politics in the LNCs and the colonial Legislative Council. Thus, a new class was not suddenly summoned up out of the mass of the African population to fulfil a role in the post-colonial order⁸². These people were organized in political

parties formed during 1960, such as the Kenya African National Union (KANU) led by Kenyatta and Kenya African Democratic Union (KADU) led by arap Moi. These political organizations articulated the internal political pressure on the colonial state to establish a new socio-political order and to dismantle the existing barriers to further accumulation. The negotiations for independence began, and independence was agreed in 1961 after several constitutional conferences held at Lancaster House in London. KADU and KANU were the largest and most influential African political organizations and represented during these negotiations the interests of the African population. Despite the differences between both political parties, they shared the ideology of the free enterprise system and private property. Pre-independence elections were held in 1963 and won with an overwhelming majority by KANU, and Kenyatta was appointed as Kenya's first African prime minister and later president. Kenya became an independent country on 12th December 1963 signifying the ultimate removal of the white settlers from the apex of state power.

2.5. Conclusions

This chapter stressed that the colonial state must not be seen solely as a manager of capitalist development in Kenya. The state apparatus and the state bureaucracy used their powers to express its own interests and perceptions of development and agrarian change. The colonial state also appeared, however to be a condensation of endogenous and exogenous politico-economic interests. The state appeared to be an ensemble of institutions upon which the various actors exercised political pressure to implement policies to further their own interests. Through a myriad of political organizations and associations, white settlers and Africans tried to influence their conditions of production as well as to control the direction in which the expansion of commodity production in agriculture could proceed. Through political representation, the white settlers in particular gained privileged access to state services and funds. The post-war reforms implemented by the colonial state under pressure of internal and external interest groups changed this situation significantly. From that time onwards, participation by Africans producers in agriculture and commerce, as well as and indigenous accumulation was strengthened.

The chapter indicated the crucial role of the state during the period between World War I and II. That particular episode must be considered as a watershed in politico-economic developments in Kenya. During that period and particularly after World War II, the state, due to an intermingling of several political forces, manoeuvred itself gradually into a position of strength vis-à-vis the white settlers who had dominated the decision making process of the colonial state apparatus for a long time. White settler interests were increasingly overruled by the colonial and the British state. From that time onward, various interests in the colony were set on a collision course which was to culminate in the Mau Mau Rebellion in the early 1950s, the proclamation of far-reaching agrarian and political reforms and ultimately in a transfer of colonial state power to an independent African government in 1963.

In this particular respect it is crucial to understand that state formation and the role of the state can and must be viewed in the light of a process: an apparatus transformed by social forces in society acting upon it as well as

society transformed by the state apparatus. The colonial state apparatus pursued policies which established an administrative and modern technological agrarian structure upon which household and capitalist commodity production by smallholders and estate producers expanded gradually. In the course of this process, a class of indigenous capitalists emerged which took the lead in the struggle for independent rule to realize a political order which would, as we shall see in Chapter 8, accommodate their economic interests. More importantly, perhaps, post-war colonial rule also laid a politico-economic foundation for household commodity production and arrested the further concentration of land.

Notes

¹ In this respect, we follow the historical research endeavours of Cowen (1981a, 1983, 1986), Cowen & Kinyanjui (1977), Leys (1975, 1978), Kitching (1977, 1980) and Swainson (1977, 1980). Their objective was precisely to establish the specificity of the transition from pre-capitalist to capitalist relations of production. Cowen in particular sees that transition as governed by a complex interaction of the forms and 'periods' of indigenous and foreign accumulation of capital over the past hundred years. An interaction, on which the colonial and post-colonial state plays a crucial role.

² The archaeological record of mankind in Kenya is the oldest in the world, stretching back some four to five million years to the earliest men and women and their immediate forebears living on the shores of Lake Turkana near the current border with Ethiopia. There is no need to review here the developments during the early period of mankind through the stone-age and late stone-age period, when food production started, up to the iron-age. We start our review in the 17th century. For a detailed archaeological review see Spear (1981), chapter I.

³ Some came from other areas of the African continent, others claimed to originate from Kenya. See Spear (1981), chapter II and III.

⁴ This makes it hard to present a coherent picture of Kenya as a whole, but nevertheless some clear overall trends are traceable.

⁵ See MacWilliams (1976), p. 3; Carlsen (1980), p. 17; Obudho & Waller, p. 8; Fearn (1961), p. 27 and Spear (1981), p. 114.

⁶ See Fearn (1961), p. 28, Spear (1981), pp. 114, 115, Kitching (1980), pp. 8-22 and Uzoigwe (1976).

⁷ The most important source is Cowen. See also Cowen & Kinyanjui (1977), Kitching (1980), Leys (1978), Fearn (1961), Cliffe (1977), Stichter (1982), Carlsen (1980), Ogot (1976), MacWilliams (1976), Mukara Ng'ang'a (1981), Ambler (1985) and Cohen & Odhiambo (1989). Leys (1978) prefers to label the pre-colonial elite as 'a class of accumulators'. Although he stresses that it involves 'primitive accumulation', this labelling is not accurate since accumulation (and hence accumulators) can only be linked with capital accumulation. What was occurring in pre-colonial Kenya was a concentration of control (not ownership) over the principal means of production in the hands of a few.

⁸ See for instance Fearn, pp. 36-38; Stichter (1975), p. 24 and Cliffe (1977), p. 200.

⁹ This statement is based on a.o. Baran (1973). He suggested the hypothesis that trade based on inter-society contact is beneficial for both sides only when they are both at a comparable level of socio-economic and technological development; conversely, the bigger the gap, the more detrimental the consequences to the weaker party (i.e. Africa). See also Sheriff (1976) and Amin (1972, 1973). Amin showed that during and since the period of mercantile-capitalism, Africa's development was stilted and in many cases reversed. Africa lost its autonomy.

¹⁰ For more detailed information about the development of trade, the effect of import/export trade on the spatial development of the Kenyan economy and company formation see: Swainson (1980), Fearn (1961), Memon (1973, 1976) and Obudho & Waller (1976).

¹¹ In the beginning, the impact of trade was merely restricted to the coast. It brought new consumption items and wealth but also destroyed the local textile, weaving and iron industries which could not survive the stiff competition of imported goods from Asian countries and later from Europe and America. When the Arabian merchants changed from

import/export trade (a.o. in slaves) to production of certain crops (grains, copra) for export under favourable economic conditions (i.e. by employing slaves), the demand for slaves increased dramatically and commercial production enterprises (plantations) were established in Kenya itself. See Sheriff (1976), Cooper (1980) and Spear (1981)

12 The establishment of a British Protectorate can be viewed as a response of the British state to the failure of the Imperial British East Africa Company to establish favourable conditions for the exploitation of the region's natural resources. Western Kenya was not part of the Protectorate and was administered by Britain from Uganda. In 1920 the Western region became part of Kenya. See Van Zwanenberg (1975), Leys (1975) and Sorrenson (1968)

13 For an in depth account of developments in Uganda, see Mamdani (1976) and Jorgensen (1981)

14 The administration invited in agricultural experts whose reports invariably stressed 'the apparent abundance of land and climate suited to both tropical and temperate agriculture' (Smith, 1976, p. 113).

15 Huxley (1957) described (from a pro-white settler point of view) the attempts of the colonial administration to persuade South African (particularly Afrikaners) and Rhodesian farmers to settle in Kenya. The plan succeeded and many Afrikaners came to Kenya, renewed their *ossentrek* and wandered in the open 'veld', clearing lands which were not occupied by white settlers from Britain. The Afrikaners laid the foundation for the colonization of the western parts of the White Highlands, particularly around Eldoret. And there they encountered the extremely warlike Nandi (see Chapter 5). The colonization of this part of the Highlands excluded the Nandi and Maasai from access to the productive pastures in the North to which they used to migrate. The Nandi were locked up into a Reserve and the Maasai were driven to the South where they still remain. After this period of 'primitive' colonization by the Afrikaners of these parts of the Scheduled Areas, many other, mainly British settlers, followed.

16 See Swanson (1980) p. 6.

17 Ibid. p. 6 ff

18 Ibid. pp. 48-51, and Lonsdale & Berman (1979). Van Zwanenberg (1975, pp. 31 ff) stresses that the state acted as an instrument on behalf of the settlers, but it was never automatically an integral part of the economy. For most colonial state officials it was a question of cultural and social identification rather than immediate structural association. The settlers did not identify with the state; to them it was an instrument to be manipulated and to be used for their own ends.

19 The KFA was born in the Nakuru area in the first decade of the 20th century through a group of farmers trying to organize the selling of their surplus maize. Its first name was the Maize Growers' Association and was later changed to KFA. The date of birth is less clear than its objective. It had been in existence for several years before its records started in 1919. In 1922 The Plateau Maize Growers' Association was founded by settlers (English and a few Afrikaners) who took up the farming of wheat and maize on the Uasin Gishu Plateau. The Kenya Wheat Growers' Association was formed in 1925 by Lord Delamare, the great advocate of wheat growing in Kenya and the founder and major shareholder of Unga Ltd. In 1927 these three settler organizations merged into the KFA. These were hard times for the settlers. Diseases, no roads, lack of capital and marketing infrastructures and the unknown climate and ecology caused a lot of trouble. The KFA's objective was to improve marketing, to ensure good prices for their products and to stimulate the scientific breeding of maize in Kenya. Levies per purchased bag were contributed to implement these objectives. The KFA was also formed to protect the weaker sections of the settler farmers by guaranteeing (minimum) prices for their commodities. KFA, however, was dominated by large settler farmers. See Huxley (1957), Van Zwanenberg (1975), chapter I and Leys (1975), chapter II.

20 In the beginning they were granted on a 21-year basis, but later extended to 99 years.

21 Swanson (1980), p. 6, Leys (1975), p. 29 and Sorrenson (1968) 'Occupied' is used to distinguish this land from actually-cultivated land. Particularly in the beginning, the settlers had neither the knowledge and funds nor the labour force to cultivate all the land they owned. The total alienated land was more than 4 million hectares by 1953.

22 See Swanson (1980), p. 63 ff.

23 See Smith (1976), p. 115 ff, Leys (1975), pp. 33-66 and Van Zwanenberg (1975), pp. 35 ff. Collier & Lal (1986), table 1.1, p. 31 mention a percentages ranging between 15.3 and 20.4 % for this period.

- 24 The reason for opposing commodity production by Africans was, of course, the fear that they could outperform white settlers quite easily (African coffee production in Uganda and Tanganyika demonstrated this quite clearly) and that it would lead to a movement of labour away from European agriculture (See a.o. Smith (1976))
- 25 See a.o. Kitching (1980), p. 200 ff and Smith (1976), p. 116 ff
- 26 See in particular Brett (1973), pp. 192 - 196 and van Zwanenburg (1975)
- 27 See a.o. Huxley (1957), Van Zwanenburg (1975), chapter I and Leys (1975), pp. 29 ff. The weakness of the settler agriculture and their financial welfare was hidden behind the high commodity prices during the 1920s. Most settlers survived thanks to high mortgages on their land which they could repay because of the high prices. The productivity of settler agriculture, however, could not warrant the debt burden of the individual settler. During the Great Depression years the debt became an intolerable burden.
- 28 Brett (1973), p. 176
- 29 Kitching (1980) p. 25, Heyer (1981), p. 103 and Mosley (1983), p. 74 ff
- 30 Ibid. and also Heyer (1975) p. 143, Carlsen (1980) p. 21, Fearn (1961) p. 43
- 31 See Swainson (1980), p. 33, 35, Carlsen (1980), pp. 21-22, Van Zwanenburg (1975), p. 5-15 and chapter III, Anderson & Throup (1985), p. 329 and Heyer (1975, 1976, 1981)
- 32 As is documented by Kitching (1980) pp. 25-57. Chapter IV of his book and chapter III of Mosley (1983) give a detailed account of African agriculture during the years of the Depression. Kitching raises an important point. The redistribution of labour time, represented in the emergence of an African working class, consisted essentially of men. The sexual division of labour on the farm changed accordingly.
- 33 Heyer (1975), p. 148
- 34 See Cowen (1983), p. 203
- 35 Access to education played an enormous role in the upward mobility of 'progressive' farmers and the nascent indigenous capitalists. The role of the Local Native Councils as well as the missionaries is important too. See Kitching (1980), pp. 188-199 and pp. 297 - 311 for the life-stories of several of the emerging 'big' men in colonial Kenya.
- 36 Cowen (1983), p. 204
- 37 'Watu wa mission' as opposed to the 'watu wa blanketi' (the men in blankets) which is the unstructured and pagan element in the reserve, see Cowen (1986), p. 361
- 38 See Cowen (1983), p. 203 and Kitching (1980), pp. 159-188 for more details.
- 39 According to Heyer this aspect is neglected in most of the analysis of agrarian change in Kenya by several authors. Heyer (1981), p. 98
- 40 For developments in Maragoli area see Martin (1984)
- 41 See a.o. Cowen's work on Central Province and Kitching (1980), pp. 108 - 159, 200 - 240, and Heyer (1981), pp. 96, 97 for developments in regions other than Central Province. In chapter 4 we shall pay more attention to regional imbalances in Kenya's agricultural economy.
- 42 Kitching (1980), p. 188
- 43 Ibid., p. 189, ff
- 44 See a.o. Cowen (1983), p. 203, Leys (1978), p. 248 and Mukara Ng'ang'a (1981), p. 11. Cowen and Mukara stress that, through litigation, quite a number of workers and squatters lost their land in the Reserves. When they returned, their land had been taken or bought by others. Some sold all they had so as to raise money for litigation, but lost the suits. Land disputes took over 75 % of the Tribunal's time and thousands of shillings were spent in litigation.
- 45 Cowen (1986), p. 364
- 46 Ibid., p. 364
- 47 Kitching (1980), pp. 16, 17. Kitching stresses that the opportunities for high off-farm incomes were generally better in Kikuyu land than in Nyanza. This situation appears to be of strategic political importance later. The Kikuyu 'straddlers' invested heavily in education which facilitated their entry into various strategic positions within the state apparatus from which they could control the state after Independence.
- 48 See a.o. Cowen (1981, 1986) and Leys (1978) p. 247, Swainson (1980) pp. 173-208, Swainson (1977), Kitching (1980) pp. 159-187, Carlsen (1980) p. 22. The rise of the new indigenous class, however, was not a creation of the colonial state and can be traced back to developments in the 1930s when commodity production started to expand in the Reserves.
- 49 Former Vice-President Oginga Odinga (1966) has clearly analyzed the strategy of straddling from this point of view in his autobiography *Not Yet Uhuru*.

50 The majority of traders in wholesale and retail belong to the Asian minority group. Their position in Kenya's political economy is such that their economic activities became restricted to commerce. Ownership of agricultural land was prohibited for Asians. Asians were never able to exercise political power, under either the colonial or independent regime, which would have sustained their accumulation. Their relative isolation gave rise to the emergence of family business operations which were reluctant to bring in outside capital and management. Many Asians remained therefore in commerce only some of them were able to move into spheres (in manufacturing) other than commerce. The family mode of operation in Asian enterprises rendered them more competitive than, for instance, settler enterprises. See Swainson (1980), p 54

51 Ibid, pp 176, ff

52 Van Zwanenberg (1975), pp 29, 30

53 It became clear to the administration that, although settlers dominated the marketed production of maize, African production was increasing rapidly, and that its producers were far too many to be effectively cartelized. The administration's first response was to regulate markets. It attempted to bring in marketing rules for maize with the intention of forcing African producers to sell in regulated markets (rather than to a plethora of small traders) and to meet certain quality standards guaranteeing higher prices. On the other hand, the KFA never had the funds nor the ability to organize the purchase and storage of maize which would have been required if the base of domestic prices was to be lifted. The maize strategy during this period was thus a complete failure. See Kitching (1980), pp 60-62

54 During the years of the Great Depression maize prices dropped from 12/- per bag to 3/- or even below, a sum far below the cost of production (wheat prices fell from 19/- per bag to 5/- to 6/- a bag). A conference initiated by the KFA, held in 1930, found that the European cost for maize was 6/50 per bag. The administration was prepared to pay the 6/50 price and thus implied an enormous subsidy. Huxley (1957), p 107. This implied also that the more efficient producers were subsidizing their less efficient compatriots.

55 The change in state policy was not and could not be achieved in one day. A new and positive strategy was clearly on its way but it is clear as Kitching argues the 'African producers could not be turned overnight into major export producers and consumers of settler products. In fact by 1938, when the depression was over, African producers still only contributed thirteen per cent of exports value'. Such a strategy would have required allocation of considerable amounts of money and manpower into the African areas. At that time, the commitment to do so was not really present, either in the administration or in the settler community. Increasing food, and particularly, maize production by African producers for the internal market and offering marketing facilities were the only way out. See Kitching, pp 60-62

56 Anderson & Throup (1985), p 329

57 The rationale of banning African production of coffee was also undermined by the successful experiences with African coffee production in the other British colonies in East Africa, Uganda and Tanganyika.

58 a o Heyer (1981), pp 102 ff. Kitching (1980), pp 59, 60 and Brett (1973), p 184

59 The outbreak of WW-II was a so-called economic boom period for African agriculture. The presence of troops from South Africa, India and Britain expanded the domestic market for food stuffs. The colonial administration's war effort was to expand food exports, particularly for the provisioning of troops in the Middle East Campaign. Africans as well as settlers were encouraged to put every available acre under food crops. The Maize and Produce Board was established by the colonial administration to maximize maize production in all suitable areas. Shortly before and during WW-II, maize production in remote areas (like Nandi and areas in Kericho) was hindered by the general absence of marketing opportunities while the conditions for maize production were favourable and maize production was only slowly expanding. The Board was created to give these areas the full benefit of high wartime prices. The creation of the Board meant that earlier arrangements made with settlers and the KFA to market maize in Kenya were withdrawn from them. See Kitching (1980), pp 108, 109, Huxley (1957) and also footnote 53 of this chapter. For an historical account of the origins of marketing boards in colonial Kenya see Heyer (1976), Brown (1968), Leys (1975) and Bates (1980, 1983).

60 See Kitching (1980) pp 106-107, Fearn (1961) pp 111-114. Fearn relates the adoption of clothing by the Africans to the teaching of the missionaries expressing Victorian ideas and values. The improvement of farming technology and crops was not only supported by the

state's agricultural extension service but was indirectly also the fruit of the hard work by white settlers in scientific plant breeding. The settlers' intention was first of all to develop an agricultural input industry which could support settler agriculture, in the second place, and, this shows how much the intention changed, to gain at least control over the input part of African agriculture when it became clear that African agriculture could not be halted any longer.

61 Quoted in Smith (1976), pp. 123, 124

62 Anderson & Throup (1985), p. 343 have highlighted this clearly. Based on several colonial agricultural reports and archives, they detect that the wisdom of the strategy to promote African agriculture was doubted. The doubters within the Agricultural Department were convinced that their worst fears had been justified. The emerging 'big men' were seen as a threat to the sociological and ecological equilibrium of the Reserves. The spread of 'selfish individualism' at the expense of the communal solidarities of pre-colonial Africa, it was suggested by these doubters, had undermined the balance between Africans and their land. Agricultural production had reached 'a scale which is positively harmful to the best interests of the land and the people'.

63 In respect it is hard to distinguish the fiscal and economic motives (high productivity and low costs) from the social motives (more welfare for an impoverished peasantry) of the administration to support small scale African commodity production.

64 A new and positive strategy was clearly on its way, however, without preventing some sectors of the colonial administration from being engaged in strategies to rescue settler agriculture. Africans, for instance, continued to pay for the tribulations of European agriculture in Kenya through the tax system [see for instance Brett (1973) and van Zwanenburg (1974, 1975)]. In addition, several plans were drawn up to improve productivity and efficiency on European farms marking a continuing concern on the part of the administration for white settler agriculture. New settlers were attracted to occupy land bought from people whose holdings were too large, credit facilities were enlarged resulting in a more intensive mixed farming systems. The proportion of land under crop in the large farm sector increased, production and wage-employment expanded marking the growth of the large farm sector during the mid 1940s and early 1950s. All this happened in a period when prices on the world market rose: the benefits of the price rises accrued largely to the settler community. Paradoxically enough, settler influence diminished in a period of economic prosperity. See Van Zwanenburg (1974, 1975), Smith (1976) and Heyer (1981).

65 Cowen (1981), pp. 131-132 pays attention to an interesting case illuminating the argument that among the Africans, interests were not uniform. In certain regions, culling, dipping and the exclusion of grade stock from holdings of smaller households was urged by 'progressive' farmers. This can be seen as an attempt by rich farmers to protect their interests by preventing smallholder production in grade cattle through state imposed action. The fact that it culminated in widespread disturbances between 1945 and 1949 illustrates that smaller households refused to be bullied by the state and the progressive farmers and that they also wanted access to improved objects and elements of labour (i.e. new and improved cultivars and instruments).

66 Forestal reallocated its investment from South Africa to Kenya. The spontaneous planting of wattle in Kenya since the early 1920s by indigenous capitalist farmers threatened to disturb the output and prices decisions of Forestal to equilibrate the international market for tanning extracts. Forestal responded by investing in Kenya and from the early 1940s, started to purchase wattle produced by middle peasants who became engaged in wattle production at the same time. For more details of wattle production in Central Province, the position of Forestal in relation to the colonial administration and indigenous capitalist farm interests, see Cowen (1982a), p. 159, 160 and Cowen (1981a).

67 The traditional role of finance capital is to facilitate the transfer of money capital into productive enterprises. All the foreign banks (mainly British and Indian banks) established offices in Kenya to finance commodity trade and to provide credit to the farmers.

68 See Leys (1975), pp. 48 ff, Miller (1984), pp. 20, ff and also Sorrenson (1968) and Furedi (1973, 1976). When the hostilities ended and Mau Mau was defeated, the human losses were great. 11,503 Mau Mau fighters were killed, while the British Army lost 101 Kenyan African and 53 European soldiers. Furthermore, 32 European civilians and 1,819 African loyalist were killed by Mau Mau. During the Emergency years, nearly a million Kikuyu were forced to move from their homesteads to protected villages. Thousands of homesteads were destroyed.

to deny them to the Mau Mau and hundreds of villages were bulldozed. In addition, nearly 100,000 Africans were held in detention camps and 27,000 Kikuyu, Embu and Meru living in Nairobi were sent back to the countryside.

69 See a.o. Van Zwanenberg (1974), pp. 165, ff.

70 Two other seminal reports signified the new policy era in Kenya. The first, the East African Royal Commission report, was a plea for a free market in land and industrial development in British East Africa, the second, the Carpenter report, argued the case for a rapid rise in cash wages to a minimum level. See a.o. Swainson (1980), pp. 113 ff. and Leys (1978), pp. 248 ff.

71 It is, therefore, no accident that finance institutions in particular, and after independence the World Bank, supported the objectives of the Swynnerton plan.

72 See Swynnerton (1954).

73 Land tenure reform has three aspects. First, the land is adjudicated to ascertain the ownership rights of individuals or groups, second, if necessary, separate fragments of land are consolidated into single units, third, these land units are registered and the land owner receives a title deed. This programme is almost completed today. Land in the districts where agricultural development is highly commercialized are virtually all registered, in some remote and dry districts registration has started only recently. For more details, see a.o. Okoth-Ogendo (1976), p. 167-170. After independence, the British state offered aid in the form of loans to adjudicate and register land, simultaneously offering the state the means to pay off the white settlers. For more details see Holtham and Hazlewood (1976).

74 Okoth-Ogendo (1976), pp. 163, 164, Swynnerton (1954), Sorrenson (1968) and Heyer (1976).

75 See a.o. Swainson (1980), pp. 177, ff., Kitching (1980), pp. 179-189.

76 Oginga Odinga's autobiography illuminates this quite clearly. His book not only reflects the frustration of the African strata to be involved in accumulation of capital, but is also a clear example of an ideological (nationalist) attack on the colonial state.

77 See Leys (1978), p. 248.

78 Swainson (1980), p. 123, ff.

79 Before World War II, industrialization in Kenya was limited due to discouragement by the British state. It feared competition with home-industry. Despite this discouragement some industrial activities were set up by white settlers. They invested a small share of their capital in grain milling, coffee and milk processing on a cooperative basis through state-sponsored bodies, such as the KFA (who had a majority share in Unga Ltd, a wheat and maize mill), Kenya Cooperative Creameries and the Kenya Planters Union. After World War II, Asian merchants reallocated their activities to manufacturing, although, before the war, some had already moved into primary processing (oil-milling, cotton ginning, jaggery factories). Some of the merchant groups emerged as large-scale industrial firms. A few even became international firms operating outside Kenya. The settlers could not withstand the competition from Asian and foreign firms. Immediately after the war, a considerable number of settler firms were absorbed by either Asian or foreign based companies. See Swainson (1980), pp. 55, 123-135. Huxley (1957) also gives rather detailed information of settler activities related to industrialization.

The period after World War II gave rise to industrialization based on import substitution. African entrepreneurs and settlers were eager to invest. Import substitution meant that British industry lost a considerable share of their markets in Kenya. Swainson explains this trend by the fact that, during the war, British industry was not eager to invest because of the war. Immediately after the war ended, industry was involved in the reconstruction of Britain.

80 Ibid., pp. 131, 132.

81 See Cowen (1986) p. 356 and particularly Cowen (1982), pp. 142 - 157 for an account of the British drive to expand colonial production. See Swainson (1980), pp. 136 ff. for the role of the CDC in facilitating industrialization in the colony. The CDC was renamed in the Commonwealth Development Corporation after independence.

82 Ibid., p. 361 and also Van Zwanenberg (1974).

Introduction

Since the policy reforms of the 1950s and, although there have been some modifications since independence, state agricultural and other policies show a remarkable, but nonetheless rather obvious, continuation. The role of the state is crucial in this respect and became even more important after the transfer of state power to an independent government had taken place. The state had not only assumed an important role in facilitating the development process in Kenya in the past, but also expanded its functions and powers (in this regard geographically as well as politically) to integrate more areas and more people in the development process.

This chapter deals with the following aspects of the state. First of all, we shall delineate how the state legitimates its leading role and how it defines its function. Then we shall examine the policy objectives or goals of the state's agricultural policy. In order to do that it is necessary to examine the politico-economic and financial-economic determinants of state intervention and policy formulation. Secondly, the stage of policy formulation and identification of policy instruments and means are specified in more detail. In the last section of this chapter we shall examine the role of foreign aid. The national level serves in this chapter as the level of analysis.

3.1. The leading role of the state

The *Development Programme* of 1957/60, drawn up by the colonial administration, laid down the general, but essential, features of future developments in Kenya in non-agricultural sectors of the economy. The programme clearly acknowledged the leading role of the state and the private sector in economic development. In clear terms it is stated that the policy of the government is 'based on the encouragement of development mainly through private enterprise'. It also emphasized that, in order to develop and sustain the system, there has to be 'a continuing injection of imported capital and skill'. The role of the state is to establish a free-enterprise economy, but it was seen as essential that the state itself ('the public sector') *facilitated and encouraged* the growth of domestic capitalism.¹

The World Bank prepared shortly before and after independence two economic reports which recommended the further implementation of both the Swynnerton Plan of 1954 and the general development strategy outlined in the 1957/60 development programme.² The independent government endorsed the views of the World Bank and asserted that private investment from domestic and international sources had a critical role to play.³

In 1965, two years after independence, the newly independent government published a *White Paper*, entitled *African Socialism and its Application to Planning in Kenya*. The paper spells out what African socialism for Kenya should be. Non-alignment (no satellite relationships with other nations), adaptability

(instead of pragmatism) and prevention of class-formation (the paper claims that class problems were non-existent) were part of the developmental rhetoric of the paper. In a separate paragraph, the paper rejects the 'Marxist-socialist' route to development as well as the 'laissez-faire' capitalist way. Instead, a threefold strategy was proposed in order to seek the fastest possible rate of economic growth.

The first objective was to reform the inherited colonial economy and to establish a *viable mixed economy*. Kenya's first president, Mzee Jomo Kenyatta defined a mixed economy as 'a situation in which the role of the private enterprise and that of a government are complementary to each other'.⁴ The second objective is to Africanize the entire economy. This meant the revitalization of existing parastatals and the creation of new ones with the specific purpose of assisting Africans to participate in the commodity economy. In another section, the paper emphasized that it is the individual rather than the state who is the initiator of economic activities. The economy was to be Africanized but not by state ownership of the means of production. The state would support the enlargement of the assets of Africans. Thirdly, the Paper acknowledged the presence of foreign capital. In the fourth place, the Paper welcomed foreign assistance and aid flows to Kenya in order to contribute to development in Kenya.

The basic lines drawn in the *White Paper* of 1965 and the Swynnerton Plan of 1954 albeit with some minor modifications, are still accurate for a characterization of contemporary state policy thinking for the agricultural sector. The *White Paper* is still referred to in order to legitimate the leading role of the state, i.e., the concentration of policy instruments within the state apparatuses which are the backbone of economic planning in Kenya.⁵ In Chapter 8 we shall deal with the political and ideological cargo of the Paper.

3.2. State intervention in agriculture: policy objectives and formulation

The Swynnerton Plan may be considered as the foundation of contemporary agricultural policy formulation and implementation. The Plan, drawn up in the early 1950s to trigger off reform, laid down the essential administrative and technological bed-rock of Kenya's contemporary agrarian structure.

The politico-administrative conditions for private land tenureship were created by the implementation of the Plan. Private land tenureship and individual title deeds on land (i.e. commoditization of land) as well as consolidation and registration of holdings were identified as the way to realize a sound agrarian structure. The colonial administration, and so the post-colonial bureaucracy, believed that private land tenure was attractive and advantageous, politically as well as economically. Private property rights to land were viewed as a means to internalize the benefits of innovative activities. Commoditization of land provided the economic incentives for productivity increases in agriculture.⁶ Commoditization of land was, in its turn viewed by the colonial administration as a means to solve the problems of the rather diffuse nature of customary land rights. Commoditization of land would also prevent the chronic and costly litigation which had become a feature of African land relations. Consolidation of land would also solve the problem of excessive fragmentation.

The second perspective of the Swynnerton Plan which aimed at promoting commodity production in the African Reserves was the provision of

administrative and technological services. An agricultural extension service for African areas was created. Agricultural research programmes were established to study the problems of African agriculture and programmes already existing were widened. Credit schemes were extended to 'African' areas and marketing policies were initiated to support commercialization of African agriculture.⁷ The transfer of new technologies - the introduction and adoption by African producers of high-value crops (coffee, tea, pyrethrum), improved food crop varieties (such as *Kitale Synthetics* and later hybrid maize varieties) as well as improved farm implements - was the agronomic backbone of the Swynnerton Plan. The technological conditions for an intended expansion of commodity production could now be based on capital intensive production. Private land ownership could serve as collateral for credit with which a capitalization of production could be financed.

From the implementation of all these measures envisaged in the Swynnerton Plan emanated the development of new, and the revival of existing, state institutions and statutory boards. The District Land Boards were established to supervise the implementation of land tenure reform. The Maize and Produce Board and various other marketing boards were mandated to expand their activities in African areas to facilitate the commercialization of production. The Special Crops Development Authority (SCDA) was established to supervise tea production by African farmers. The Agricultural Finance Corporation (AFC) was launched to administer the flow of credit.

Together with land conservation programmes and a considerable increase in agricultural extension work, the expansion of cultivated land and extended credit facilities offered by the state in the former Reserves resulted in a dramatic increase in agricultural marketed production.

The Swynnerton Plan proclaimed an agrarian revolution finally destroying all elements of the former colonial agricultural policies. More importantly, perhaps, the Plan provided the state with the legal means to realize the development of a technological-administrative structure upon which commodity production could expand. The majority of institutions which formed the core of the structure were mainly concentrated within the state apparatus. This did not only result in the envisaged expansion of commodity production and capitalization of production by small-scale African producers through the extension of capital loans, services and production inputs. It is also very significant because of the political integration of these producers and an extension of state control into areas which were hardly incorporated or touched by commoditization processes previously.⁸

Before we continue to describe how the contemporary state formulates its policy objectives, it is crucial to anticipate the financial-economic determinants for state intervention and policy formulation since *Uhuru*. These developments were going to have a major impact on policy formulation and implementation.

3.2.1. Financial-economic determinants for policy formulation

The immediate consequence of the reforms implemented in the 1950s and a continuation of the implementation of colonial agricultural policies after independence, was that commodity production for the international market (e.g. coffee, tea pyrethrum, pineapples, sisal and wattle), as well as of food crops like maize, wheat and rice for the internal market, increased

enormously. The trends in the commercialization of agricultural production are shown in Table 3.1.

The economy after independence experienced GDP growth rates in the range of 4.6 to 7.7 % per year. Between 1965 and 1980, GDP annual average growth rates were 6.4 %. Between 1980 and 1987, the growth rates slackened down to an average of 3.8 % per year.⁹

Gross marketed production in agriculture and livestock increased from K£ 7.76 million in 1958 to 9.62 in 1960; from K£ 75 million in 1969 to 320 in 1979 and to K£ 945.74 million in 1988 (expressed at current prices). Average farm incomes rose steadily, being some 178 % higher in 1952 than they had been twenty-one years earlier. In the 1960s and early 1970s, agricultural development recorded annual average growth rates of 4.6 %. In the late 1970s growth in agricultural GDP per capita dropped to an average of 1.2 %. The average growth rate for agriculture during the period 1965 - 1980 was 4.9 %. From that time on until 1987 the agricultural sector experienced average growth rates of 3.4 % per year, however, with substantial annual variations,¹⁰ - a respectable growth rate, but still about 0.5-1 % less than the population growth rate which is estimated at 4 % per annum.

Table 3.1. Increase in recorded marketed agricultural production purchased by Marketing Boards in Kenya, 1946-1988, for selected crops ('000 tons)

	1946	1950	1960	1970	1980	1988*
<i>Cereals</i>						
maize	70.5	100.5	168.8	205.7	217.9	485.3
wheat	73.0	126.9	126.7	221.5	204.6	220.2
<i>Temporary indust. crops</i>						
sugar cane	-	-	335.0	1451.0	3972.0	3800.0
pyrethrum**	6.7	1.8	8.5	50.0	100.0	102.0
<i>Permanent crops</i>						
coffee	9.0	9.8	23.4	58.3	91.3	124.6
tea	5.5	6.7	13.6	41.1	89.9	164.0
sisal	127.0	39.8	59.7	43.9	46.9	36.9
<i>Livestock and products</i>						
cattle/calves ('000 head)	265.9	217.3	307.0	368.4	91.9	701.0
milk+ ('000000 litres)	24.7	36.3	37.6	103.1	186.8	359.0

* provisional

** the figures for '46, '50 and '60 stand for pyrethrum flower, for '70, '80 and '88 for pyrethrum extract equivalent (tons)

+ sales to Kenya Cooperative Creameries and sales licensed by Kenya Dairy Board; 1946-1960 mainly represent milk sales from large farms

Source: Economic Survey, 1961-1989; Statistical Abstract, 1955-88.

The remarkable economic success in the agricultural sector during the period immediately after independence was not only fuelled by policy reforms envisaged in the Swynnerton Plan, but was also induced by an expansion of the area under cultivation, the integration of numerous household producers in export production schemes and the market-oriented farming strategies of the farming population. In addition to that, international terms of exchange were extremely favourable during the immediate post-independence period. The economic success due to a rapid expansion of commodity production in

agriculture during the 1960s and 1970s facilitated an enormous expansion of commodity relations in the country-side. It permitted the growth of an internal market for productive and consumption items such as production inputs, food, education, health and transport. This, in its turn, fired the post-independence ambition for indigenous capitalist accumulation in transport, manufacturing, commerce and services. The favourable economic growth rates contributed simultaneously to the an increased trust by the rural population on the post-independent state and enhanced the legitimacy in the state vis-à-vis the population in the rural areas.

Current developments in industry are a continuation of trends emerging shortly before independence. During the early post-independence years, the industrial sector - and particular manufacturing - and commerce/service sectors realized remarkably high growth rates. Between 1965 and 1980 industry grew at an annual average rate of 9.8 % and manufacturing at a rate of 10.5 %, while the commerce and service sector realized a growth rate of 6.4 %. During the period 1980-1987, growth rates declined to 3 %, 4.3 % and 4.4 % respectively.¹¹

Several surveys of industrial production by CBS Kenya give evidence of the marked increase in numbers of agro-processing industries for meat and dairy produce, canned fruit, fish and oils, grainmill products, sugar and confectionery, miscellaneous foods, beverage and tobacco, pyrethrum extract and miscellaneous chemicals.¹² Because the surveys are based on samples of different sizes, it is difficult to present empirical data for a specific historical time period in order to analyze the above-mentioned trend. It is obvious that in an economy increasingly devoted to the market, and with such a large proportion of production being market as in Kenya, various agro-industries and trading enterprises will develop. Besides the increase in number of established industries, the Statistical Abstracts show a steady increase in quantities produced.¹³

The international terms of trade for Kenya's principal export commodities - conditions which are beyond local state control - deteriorated dramatically, however, during the late 1970s. The deteriorating terms of trade must have resulted in a considerable decline in average income from marketed production for almost all agricultural producers. With the ending of the 1977 export bonanza, the inflation in energy costs (mainly of oil) and the steadily increasing prices of imported goods, GDP per capita growth rates dropped from 5.1 % in 1976/1977 to 1.2 % in 1978-1980.

Apart from growth rates, the tourism sector gradually outstripped coffee and tea as the major foreign exchange earner due to changes in international economic conditions. For years, coffee and tea provided the state with approx. 40 % of the foreign exchange with which development planning was financed. Total agricultural exports provided, depending on world market prices, roughly an average of 50-65 % of total export earnings. Although the agricultural sector is also a user of foreign exchange, it still finances approx. 29 % of the imports by the rest of the economy. This leaves 71 % of the non-agricultural import bill to be financed by foreign exchange inflows from tourism, foreign aid, private capital and external borrowing.¹⁴

Table 3.2. Indicators of economic development, government income and expenditures in Kenya, various years

Agriculture and Food	1974/1975	1986/1987
cereal imports ('000 tons)	15	274
food aid ('000 tons)	2	107
fertiliser consumption	238	518
index of food production per capita (1979/81 and 1985/87 resp.)	100	93
Growth of trade (%)	1965-1980	1980-1987
exports	0.3	-0.6
imports	1.7	-3.0
terms of trade (1980, 1987)	100	80
Structure of exports (%)	1965	1987
fuels, minerals, metals	13	21
other primary commodities	81	62
machinery/transport equipment	0	2
other manufactures	6	15
Structure of imports (%)	1965	1987
food	10	9
fuels	11	21
other primary commodities	3	4
machinery/transport equipm.	34	34
other manufactures	42	33
Energy	1965-1980	1980-1987
energy consumption		
growth rate (%)	4.5	-0.2
energy cons/capita	110	99
energy import (% of exports)	13	39
Consumption/investment	1965-1980	1980-1987
annual average growth rates (%)		
general government consumption	10.6	0.8
private consumption	5.7	3.1
gross domestic investment	7.2	-2.3

Source: World Development Report 1989, pp. 170-174, 178-179, 190-196.

Table 3.2. is a reflection of the immediate effects of the deteriorating terms of trade on the performance of the Kenyan economy. It shows the limitations of an economy depending on imports and primary commodity exports.

A major consequence of the decline in world market prices and the rising import bill (particularly of oil) was that state revenue was rapidly falling. The state's balance-of-payments current account deficit trebled since the mid 1970s.¹⁵ The only exception was 1977 when the international terms of trade for coffee and tea were extremely favourable as a result of which the current account deficit was less dramatic (only K£ 15 million). Table 3.3 displays the developments of Kenya's current account deficits.

Table 3.3. Current external and loan accounts, 1968-1989 for selected years (in K£ million)

Year	Balance of payments/ curr. acc. deficit	Bilateral loans+	Multil. loans*+	Total loans	Loans as a proportion GDP (%)**
1965	-7	42	44	86	n.a.
1968	-14	53	58	111	n.a.
1971	-40	59	73	122	11.5
1974	-58	81	34	115	11.3
1977	-15	122	87	209	11.2
1980	-373	343	154	497	16.4
1983	-326	656	512	1168	30.5
1986	-404	1173	856	2029	36.1
1988	-403	1568	1149	2717	35.6
1989	-456	n.a.	n.a.	n.a.	n.a.

+ excluding grants

* loans from World Bank, IDA, ADB, IMF, Opec Fund, EEC

** GDP at current market prices

Source: Cowen (1986), p. 369; Statistical Abstracts (1982, 1987); Economic Survey (1966, 1973, 1982, 1983, 1986, 1989); Financial Times, 18-10-1989.

State revenue from taxes - on international trade and transactions and on incomes and profits - and other sources of non-tax revenue declined dramatically since the 1970s. Expenditure on health, housing/social welfare and economic services declined at about the same rate. Falling revenue was only partly covered by an increase in domestic taxes on goods and services.¹⁶ Table 3.3 indicates that the volume of external loan finance increased rapidly. Moreover, the reliance on IMF-loans increased at the same rate.¹⁷ Whereas debt servicing accounted in the early 1970s for a relatively low percentage of 3 % of the total value of export of goods and services, the proportion reached 12.3 % in 1982 and rose to 15.3 % and 17.1 % in 1985 and 1988 respectively.¹⁸ Between 1971 and 1978, external financing accounted, on an annual average, for 12 % of GDP; after 1979 and during the early 1980 this proportion nearly doubled to an annual average of 21 %; in the second half of the 1980s, the proportion even trebled to 36 %.

For the financial year 1989/1990, *Treasury* predicts a current account deficit of K£ 458 million. The government is asking donors for additional support of K£ 197.5 million, mostly in balance-of-payments support, loans and grants, on top of the existing donor commitments.¹⁹ The contribution of aid to total government expenditure has increased substantially since the mid 1970s. Foreign aid contributions for the financial year 1989/1990 are estimated at 28 % of total government expenditure.²⁰

The deteriorating external economic conditions and falling state revenue made it extremely difficult to implement all the policy objectives and to deal with the high expectations which various people and interest groups entertained from *Uhuru* and the independent state.

3.2.2. The evolution of policy formulation

The more recently conceived objectives and efforts of Kenya's development targets and policy guidelines are published in four year *Development Plans* and various *Sessional Papers*. Sessional Papers are official publications of the government that spell out major policies affecting development. Development Plans are drawn up by the Ministry of Finance and Planning (Treasury). The plans set out the general targets for economic growth for the plan period as well as the general guidelines for their implementation. Development Plans are in their turn translated in to various Provincial Development Plans and District Development Plans.²¹

A central issue in these papers and plans is that the objectives of previous plans (i.e., the ones drawn since the 1950s) which have made substantial progress in building the technological, infrastructural and administrative base for the development of agriculture and industry, are re-asserted and should be consequently implemented.

The general objective of development planning is to 'improve the well-being of the people of Kenya'.²² Emphasis is placed upon continued economic growth, the creation of income earning opportunities, the increase in output and quality of services and improved income distribution. The basic objectives, couched in terms of freedom, opportunity, equality, social justice and equity, are to be pursued on the basis of four principles that are considered fundamental to the development process. These principles are: widespread participation in development; diversity of social organizational forms and incentives in advancing the economic and social objectives of development; government participation in initiating and directing development with the highest standards of efficiency; and mutual social responsibility through promotion and regulation of economic activities.

One of the basic objectives of development planning is the alleviation of poverty. The *Development Plan 1979-1983* conceived that poverty had several dimensions of which inadequate income is the most obvious one. A general target group is identified: the group of families engaged in smallholder agriculture who constitute about 80% of Kenya's total population. The first *Integrated Rural Survey of 1977 (IRS-I)* disclosed that 41 % of smallholder families feature incomes of less than K£ 100 per family per year including subsistence production. Another 14 % of those families had incomes in the range of K£ 100 to 150 per family. Incomes of that order are considered by the administration to be insufficient to provide more than the basic necessities of life. To this large target group belong: the pastoralists (with incomes mainly from livestock in a nomadic setting, numbering at that time 195,000 families); small farmers (those with land and whose income is mainly derived from agriculture, 618,500 families); and landless rural workers (those who have little or no land and mainly derive their income from casual farm labour and non-agricultural work, 410,000 families). Handicapped adults (140,000 families) and the urban poor (with incomes derived generally from casual self- or wage-employment, 40,500 families) were also targeted as special groups for government attention.²³

Killick (1981), comparing the third and fourth development plans comments that the fourth plan's 'effort to identify poverty groups and to estimate the magnitudes is a laudable step in building a data base essential for effective anti-poverty policies. It is also commendably frank in drawing

attention to the implication of its estimates - that half of the total population lives below the poverty line.²⁴

The fourth *Development Plan 1979-1983* as well as the subsequent issued plans were, contrary to the earlier plans, drawn up in a period of adverse international conditions for agricultural growth. Import prices of oil and capital goods for agricultural (tractors, combine-harvester, spare parts) and industrial purposes rose dramatically before and during the Plan years, while export prices decreased even more dramatically.

The fourth (1979-1983) and the later issued fifth *Development Plan 1984-1988* stated repeatedly that the period of easy development was over and drew attention to the emergence of two serious constraints: shortages of foreign exchange and an inability to sustain government spending at its past rate of expansion.²⁵

In this situation it is no wonder that the state implements an import restriction programme as well as frequent currency devaluations, while, at the same time, the state's major criterion for economic growth is the maximization of foreign exchange earnings. In the Kenyan context, this means expanding agricultural export production and particularly smallholder production which since the 1950s has become largely directed towards export commodity production. The government increasingly recognizes that smallholder commodity production promotes foreign exchange earnings and that the smallholder community provides the state with revenue and access to foreign exchange. Simultaneously, the state under Moi puts more effort into the reorganization of government spending and investment than during the previous Kenyatta-regime.²⁶

The fourth Plan emphasized that agricultural expansion faces a number of constraints which are now more severe than in earlier years. The Plan notes the following constraints.

'(1) Population growth is creating shortages of land and the emergence of a landless class in the rural economy. Soil erosion will increase with it as well as subdivision of farms into unviable small plots. (2) Agricultural growth will have to rely primarily on production development and improved market efficiency rather than higher producer prices. The government asserts that producer prices can not be manipulated in such a way to induce greater output. (3). The technology constraint will be more severe. No R&D breakthroughs are currently available to achieve major improvements in productivity. (4) The implementation of programmes designed for non-progressive farmers, pastoralists and for medium and low potential land will be more difficult than was the case in earlier periods when agricultural services were primarily geared towards the larger, more progressive farmers, cultivating mainly high potential land.'²⁷

The state conceded with this that previous plans and economic growth patterns drove a wedge between sections of the agricultural population as well as between agricultural production zones. That is, to use the state bureaucracy's vocabulary, between progressive and non- progressive farmers and high and medium potential areas and low potential areas. With this it was explicitly acknowledged by policy makers that certain regions and strata of the peasantry did not benefited from economic development. The fourth *Development Plan* stressed, therefore, that:

'small farmers will be given every opportunity to increase their participation in the monetary economy. Among small-scale farmers, greater attention will be given to those who have been lagging behind up to now. Rural access roads will be built so that the flow of inputs to such farms can be expanded and produce more easily be brought to the market; extension services and credit will be increasingly directed to the small farmer; consumer goods and social services will be brought within reasonable distances; water and power will be increasingly extended into the rural areas; and the means and resources devoted to identifying inexpensive and easily repairable technologies which will enhance small farm productivity and ease the problems of off-road transport will be increased.'²⁸

In 1981, the state outlined and adopted a *National Food Policy* (Sessional Paper No. 4). This policy document serves together with the fourth and fifth development plans, the *National Livestock Development Policy* (1980), *Guidelines for Development Prospects and Policies* in 1982 (Sessional Paper No. 4), *Economic Management for Renewed Growth* in 1986 (Sessional Paper No. 1), and the continuing political debate about grain marketing, as a policy framework for the contemporary efforts to co-ordinate government intervention in agriculture.

A particular goal of state agricultural policy is to attain self-sufficiency in food. Four agricultural commodities - maize, wheat, milk and meat - have been identified as central to reach this objective. At the same time the agricultural sector must continue to generate foreign exchange earnings to pay for oil, capital equipment and other essential imports. Coffee, tea and horticultural crops are crucial commodities in this respect. In addition, the agricultural sector must be the major source of new jobs for the rapidly growing labour force.²⁹ Furthermore, the agricultural sector must continue to substitute for imports of industrial crops. Self-sufficiency in these crops and food crops would reduce the need for imports and prevent a further deterioration of the country's balance-of-payments. This particular objective can be traced back to the early 1960s. The first *Development Plan 1966-1970* sets out a programme of import-substitution and industrialization to diversify the economy from its agricultural base and to promote the import-substitution of agricultural commodities, such as sugar, malt, cotton, tobacco, vegetable oils and oilseeds. Most of these commodities had to be imported at independence. To increase local production, since 1965 substantial private and public funds have been invested in raw material production and in the processing activities for these commodities. Within this policy framework, foreign (such as Unilever [oils], BAT [tobacco], CDC [tea], Booker McConnell [sugar production and processing]) and local companies (such as Kenya Breweries Ltd [barley]) were attracted to participate directly, or in a joint venture with the state, in commodity production schemes. The majority of these production or contract farming schemes came to be peopled with smallholder producers.

The central objective of contemporary state policy is to increase food production and to attain of food self-sufficiency in such a way that export production is not endangered and forest reserves not destroyed. Given these constraints, there is little potential in Central and Eastern Province for an expansion in the area of good quality land and devoted to food production. Of the high and medium potential land not under forest in these provinces, all

but an estimated 7 and 32 %, respectively, is being cropped. The only available options to increase food production are to increase crop yields and to adopt intensive techniques of animal husbandry. The plan goes on to clarify that increases in yield may be achieved by increased intercropping and multi-cropping; by increasing fertilizer application and other inputs used; by the progressive introduction and adoption of improved seeds and livestock; and by other improvements in cultural practices.³⁰ In order to attain these objectives the government is taking several measures. Four major policy areas are briefly outlined here.

The first major policy area for government action is pricing and marketing. The intention is to improve the efficiency of the food marketing boards, and of the National Cereal & Produce Board (NCPB) and the Kenya Meat Commission in particular. Existing restrictions on inter-district and inter-regional movements of maize and other produce impede nationwide distribution by private traders and add to marketing costs and consumer prices. The long term aim is to simplify the marketing system by removing the artificial movement restrictions and employing the NCPB as a buyer and seller of last resort.³¹ Private traders should be allowed to operate more widely and without restrictions. A major restriction for private traders in maize is that trade between districts is prohibited. NCPB is the only agent in maize marketing permitted to trade beyond district borders.

Prices paid to the producers for harvested crops are identified as a major incentive for the farming population to produce food for the market. The government's intention is to regulate producer and consumer prices in order to protect both consumers and producers. Particularly farm-gate food prices should be related to import parity. The government recognizes the instability of world grain markets, so it will set domestic prices based on longer-term parities.

Another central objective of the policy is to ensure that adequate inputs are made available at the lowest possible prices at the farm gate.³² A proper distribution of production inputs and the provision of credit through the expansion of seasonal credit schemes are perceived as vital to reach that objective.

A second important policy area is agricultural R&D and extension and services. The attainment of the above-stated objectives requires a continued search for productive crop varieties. The Kenya Seed Company (KSC) fulfils, together with the Kenya Agricultural Research Institute (KARI) and the National Agricultural Laboratories (NAL), a central role in this objective. Attention must also be focused on the improvement of crop and livestock management. In addition, the extension services of MOALD will be strengthened in order to guide and improve the flow of information to the farmers.³³ Recognizing that research and extension have mainly been oriented towards the needs of the high potential areas and large farmers, the government now intends to switch the focus onto the development of technologies appropriate to the arid and semi-arid lands and the development of labour-intensive technologies appropriate to smallholder food production. This will be achieved through work on the introduction of new crop varieties, while the main emphasis is on increasing food production on small farms.³⁴

A third crucial policy area emphasized in Sessional Paper No.1 of 1981, is land and resources. Land tenure systems, as well as laws and regulations

governing the transfer and adjudication and registration of land, are key aspects according to the government. Appropriate land ownership and transfer systems must be worked out. The District Development Committees will be responsible for co-ordinating and overseeing activities related to land issues. Land speculation must be discouraged. In addition to that, land management practices that maintain soil fertility, prevent soil erosion, silting and protect water catchment areas will be fostered.³⁵

The fourth policy area is employment. Unemployment is identified as a major problem. The basic aims of manpower development policy are to increase the willingness of the population to participate in agricultural development and to equip the agricultural work force with appropriate technical and managerial skills. To meet this objective, great emphasis will be placed on vocational training for agriculture and the expansion of existing training institutions. Labour intensive techniques will be a major area for attention. Additionally, the constraint of seasonal labour shortages in certain areas and labour surplus in others, has to be alleviated by increasing labour mobility and by increasing of labour productivity at times of labour shortage.³⁶

In order to improve efficiency and co-ordination of activities in the various districts, the Kenya government embraced a policy geared towards decentralization. The rigid and centralized control of the state apparatus was replaced by the 'District Focus'.³⁷ The district level is indicated as the most appropriate level for planning and policy implementation. Public funds will be allocated to the district. According to president Moi, the district is the right level at which to spend money. The responsibility of the District Commissioner and the District Development Committees (DDCs) increased substantially in taking local initiatives in the field of agricultural development and matters of food security. Five to ten percent of district development budgets will be decided at the level of the DDCs. The consequence of this policy change was that the position of local government vis-à-vis the central state apparatus improved and is considerably strengthened by an expansion of its development bureaucracy. The co-ordination of crucial tasks in the implementation of agricultural policies, and particularly the food policy, remains, however, in the hands of MOALD.

3.3. Policy instruments for intervention

The previous section indicated, besides policy objectives, various policy sub-sectors and institutions. The concrete policy objectives are passed on to various sub-sectors and into state institutions. Equipped with these instruments, the state hopes to implement its policies. Figure 3.1. summarizes the sub-sectors and the institutions. The figure shows clearly the supremacy of two central state institutions in policy development: the Office of the President (OP) and the Ministry of Finance and Planning (Treasury). The role of the so-called technical ministries - Ministry of Agriculture and Livestock Development (MOALD), Ministry of Cooperative Development (MOCD), the Ministry of Lands and Settlement (MLS) and Ministry of Environment and Natural Resources (MENR) - is first of all to implement policies and development programmes and projects. Secondly, these ministries have a strong regulatory function as can be seen from Figure 3.1.

Figure 3 1 State intervention in agriculture in Kenya

Sub-sectors	Institutions	Level	Mandates/activities
Policy formulation	Treasury	N	resource allocation to agricultural sector establishing long term sectoral goals, drafting and monitoring development plans
	OP	N	collecting (agricultural) statistics (CBS) coordination of development activities
Land relations and distribution	MLS	N	supervise land transactions, registration/adjudication/consolidation
	DDC's	D	supervision land settlement schemes secure legal property right to land
Agricultural Research and Development	KARI	N	co-ordinate research activities
	NAL	R	conduct on-station research collecting genetic resources and maintaining genebanks
	KSC	N	seed production/packaging
	NSQCS	N	seed testing, quality control
	ADC	N	seed production/livestock breeding and range improvement programmes
	Private comp parastatals MENR	R R N	seed production and crop research crop research and seedling production forestry research and afforestation programmes, collection and monitoring of natural resource data
Promotion of use of modern inputs	MOALD	N/D	co-ordination/training staff extension guidelines through T&V method and FTCs through extension
	private comp	R	supervision of production in specific production schemes (tea, tobacco, sugar cotton, barley, oils)
	parastatals	N	
Promotion of mechanization	MOALD	N	promotion of mechanization
	THS	D	implementation and services
Credit	AFC	N	provision of credit
	CBK	N/D	provision of credit to cooperatives
	Priv Banks	N/D	provision of credit to individuals
	Treasury	N	regulating credit flows
Cooperative development	MOCD	N	regulation/supervision of unions and cooperatives, technically/financially
Importation of inputs	OP	N	issuing import licences/fertilizer
	Treasury	N	allocation, import restrictions,
	MOALD	N	quantitative and qualitative
	Pest Control Board	N	advice/import regulation of agro- chemicals
	Treasury	N	coordination/procurement of fertilizer aid

Input supply	KGGCU/KFA	N	input distribution licensed importers of inputs end-users' of imported inputs in production schemes by obtained import licence
	private comp	N	
	Cooperatives	D	
	parastatals	N	
	private comp	R	
Price fixation/ control	OP	N	Annual Price Review: price fixation on all levels (cons., prod., retail, input and processing prices; fix producer prices export commodities determined by int. terms of exchange
	Treasury	N	
	MOALD	N	
	Export Boards	N	
Marketing control	Marketing Boards	N	monopoly marketing position; boards are supervised by MOALD mandated to market produce and deliver to marketing boards or other authorized traders restricted by laws prohibiting purchase and movement of food (maize) beyond district borders
	Cooperatives	D	
	Farmer union	D	
	Private traders	D	
Physical infra- structure	MTC	D/N	rural access roads planning and building rural water supply and assistance in constructing water supply components in MOALD projects
	MWD	D/N	

N= national level

R= regional level

D= district level

Source: National Food Policy Paper (1981), World Bank (1984), AIR/World Bank (1985)

The core of agricultural policy is to facilitate marketing and increase production through the promotion of productivity enhancing technology in agriculture. The latter is enabled by establishing linkages between agricultural research and the farming population through extension services in order to secure the adoption process. The supply of credit and the legal property right to land are, therefore, perceived as crucial ingredients of agricultural policy.

Figure 3.1 shows that MOALD is a central institution in the process of technology transfer to the agriculture sector. Within MOALD, the Tractor Hire Service (THS) was established in 1966 to stimulate mechanization. The ministry is also responsible for the implementation and co-ordination of agricultural extension programmes and veterinary services. MOALD designs the basic extension guidelines and agronomic objectives and is also involved in organizing training of extension field workers. From MOALD's headquarters in Nairobi, the ministry instructs the district level extension service which is present in every district in Kenya and located in the district administrative centres.

The extension method used to reach the farmer comprises Training and Visit (T&V) programmes, trials, field days and annual agricultural shows. In this way new technologies, new husbandry and farming methods and research

results are brought to the farmer. The T&V system was established based on recommendations from the World Bank. The essence of T&V consists of regular training sessions for field staff at which extension messages are discussed, in conjunction with frequent visits by field workers to representative farmers (the so-called contact farmers). The latter act as the person passing on the extension message to the larger farming community. In addition to extension field work and visits to farmers, Farmers Training Centres (FTCs) are set up at district level to complement the extension service. The idea of establishing FTCs to train individual farmers originated in the early 1950s and was extended rapidly in the 1960s.³⁸

The colonial legacy of the instruments of state intervention in the economy is apparent in many sub-sectors. The post-colonial state did not change this mode of organization and confirmed the responsibility of state involvement in the economy in cooperation with the private and cooperative sector. These objectives, presented as reforms, are clearly expressed in the *White Paper*.

The commitment of the post-colonial state to enhance economic growth is moulded in four forms: in parastatals and boards, by state participation in production enterprises, import regulations and price fixation. Promoting cooperative development is another major element in Kenya's development strategy in which the state plays a crucial role.

As is the case in many other African countries, the main method for the colonial and post-colonial state embraced to ensure state power in the rural and urban economy was the establishment of numerous parastatals and statutory boards. After independence, various parastatals were revitalized and new boards were created by the state. State intervention in the economy has increased considerably since independence.

These prominent state institutions in agriculture do not own agricultural land. The only parastatal company owning land in Kenya is the Agricultural Development Corporation (ADC).³⁹ The economic functions of the state are thus primarily oriented towards facilitating growth and accumulation in agriculture by the private sector, rather than, by constituting itself as a producer to accumulate on its own behalf.

3.3.1. State intervention through boards and parastatals

A government working party, the Ndegwa Commission Report issued in 1982, revealed that there were 147 statutory boards established under specific Acts of Parliament.⁴⁰ With regard to agricultural development, the statutory boards can be grouped into four functional categories: commercial marketing boards, commodity development authorities and corporations, finance boards and advisory/regulatory boards. The monitoring of these agricultural parastatals is in the hands of MOALD. Monitoring includes also financial management and control.

The history of some of the *marketing boards* stretches back to the 1930s or even before. During the colonial period, the state established marketing boards for almost every crop grown in the country. These boards were granted a monopoly position in price arrangements as well as in the purchase of agricultural commodities. The majority of them were initially established by the colonial state to facilitate and support white settler agriculture. They were mandated to operate with a monopolistic pricing and marketing policy in favour of the white settlers. After independence, the state maintained its

dominant position in the circulation sphere of the economy. The boards are still the major institutions, although the number of authorized purchasers of agricultural commodities is increasing. In particular, the marketing share of marketing cooperatives in certain commodities is considerable (see below). Recently, private traders have been authorized to become more involved in the purchase of grains: an activity which has long been restricted geographically as well as monopolized by the Maize and Produce Board/NCPB.

The Maize Control Board (renamed in the Maize and Produce Board in the 1950s) was set up in 1942 to regulate prices and stabilize maize production. The Wheat Board was established in the 1930s. The Coffee Board of Kenya was created in the same period. The Maize and Produce Board merged in 1982 with the Wheat Board shortly after the Ndegwa Commission recommended the merger. The joint board was renamed the National Cereals and Produce Board (NCPB). The Kenya Meat Commission was established in the 1950s. Two other boards are the Pyrethrum Marketing Board and the Cotton Lint and Seed Marketing Board. During the third plan period, 1974-1978, the Kenya National Trading Corporation was assigned the task of marketing locally produced sugar and of organizing imports.

To enhance smallholder production special *development authorities* were created. These authorities are particularly responsible for production, marketing and processing where smallholders are involved. To expand smallholder production in tea, the colonial state created, as envisaged in the Swynnerton Plan, the Special Crops Development Authority (SCDA) in the 1950s. Later, in 1977, this board was renamed the Kenya Tea Development Authority (KTDA). KTDA handles all smallholder tea and processes the tea in its tea factories. The majority of these factories are owned by the KTDA. The Horticultural Crops Development Authority (HCDA) was constituted in the 1970s to coordinate and supervise horticultural production which is primarily directed at export markets. HCDA has limited powers in the marketing sphere.

The Agricultural Development Corporation (ADC) is considered by the state as a *strategic* development institution. ADC's activities are primarily oriented towards establishing a solid structure for farming in Kenya. ADC is directly involved in multiplication of maize seed, maize seed drying, seed potato production and storage, and is particularly devoted to improving livestock in the country through intensive breeding and exchange programmes.

Advisory boards are institutions regulating and overseeing activities in the marketing of various crops. These include a.o. the Tea Board of Kenya, Sisal Board and the Kenya Sugar Authority. The Pest Control Board, established in 1982, advises on, and regulates imports and distribution of, agro-chemicals. The Land Control Boards are an important type of advisory board. These are established at national, provincial and district level. To this group of state organizations can also be added, the Kenya Agricultural Research Institute (KARI), the Coffee Research Foundation, the Tea Research Foundation and the National Council for Science and Technology. KARI, established in 1979 within MOALD, is mandated to coordinate agricultural research in the country.

The *financial agencies* through which the state intervenes in the economic sphere are the Agricultural Finance Corporation (AFC), Industrial

Development Bank (IDB) and Industrial and Commercial Development Corporation (ICDC). These agencies supply loans to individual entrepreneurs and were the main instruments in the process of Kenyanization of the economy after independence. In addition, the IDB and ICDC are the main vehicles for state participation in various enterprises.

3.3.2. State intervention through joint ventures

The second form of state intervention is through state participation in various companies. The politico-economic import of state participation through joint ventures has already been dealt with in Chapter 8.

According to the Ndegwa Report (1982), 47 companies were wholly-owned by the state; it has a controlling interest (i.e. more than 51 % of the shares) in 36 companies and in 93 companies the state is a minority shareholder.⁴¹ The enterprises in which the state holds shares operate in various economic sectors: industry, tourism, commerce, insurance and finance. The agencies through which the state participates in enterprises are the above-named IDB and ICDC. In addition, some boards and development authorities (such as the NCPB, ADC, KTDA, Coffee Board) own shares in processing factories.

The state has important joint ventures in the agricultural production sector with local and/or foreign agribusiness companies. These joint ventures all produce commodities which at the time of independence had to be imported in considerable quantities. These companies were invited to operate, supervise and manage smallholder contract farming production schemes in partnership with the state. In many cases the expansion of the commodity production schemes was funded by foreign finance institutions and/or aid agencies. These particular schemes entail the following crops.

-Sugar cane production: in four out of seven sugar companies the state is a majority shareholder, in one company, a minority share holder. Participating enterprises are a.o. Tate and Lyle, Booker McConnell and Madhvari. The remaining two are fully owned by foreign companies.

-Tobacco production: British American Tobacco Kenya Ltd (BAT-K) is a joint venture with BAT International in which the state owns 60 % of the shares.

-Oilseeds and vegetable oils: East African Industries (EAI) is a joint venture of the state (through the parastatal company Industrial and Commercial Development Corporation) and Unilever, in which the state holds 34.15 % of the shares. Recently, the state launched through the newly formed Oil Crop Development, two projects to boost vegetable oil production. The largest project is a joint investment involving EAI, the Commonwealth Development Corporation (CDC) and the World Bank. The latter two provide loans while EAI is involved in the management and supervision of the scheme.⁴²

Through these production schemes, the state hopes to establish an economic structure with a double pay off. Increased production saves foreign exchange. In addition, these schemes provide jobs and development opportunities for the low potential areas and they will strengthen relations between agriculture and industry. For example, oilseed and vegetable oil schemes produce animal feed for the livestock sector.

A particularly important joint venture in the agricultural production sector is the Kenya Seed Company (KSC). The KSC was originally set up in 1956 as a settler company. Since independence, the state has gradually acquired more influence on the operations of the company. The state has increased, through

the parastatal company ADC, its shares in KSC. Around 1970, the state had a 10 % share-holding but is now the majority shareholder in KSC: 52 %. The Kenya Grain Growers Cooperative Union (KGGCU) owns 27 % of the total shares; the remaining 21 % still remain in private hands (individual farmers or businessmen).⁴³ The KSC functions nowadays, together with the KGGCU, as a major vehicle for the state in the implementation of its national food policy. KSC fulfils a specific function in the promotion of improved crop varieties in agriculture. Improved seed production is an important ingredient of state policy. The objectives of KSC (and KGGCU) are outlined in the National Food Policy. The state uses its majority shareholder position to impose pricing decisions and production targets for seed production on KSC. In realising the objectives of KSC, the state, through the ADC, is directly involved in this particular case as a producer of commercial maize seed.⁴⁴

KSC is now the main source of commercial seed in Kenya. Since 1956, the KSC has devoted much of its time to the development and production of seeds of maize, wheat, barley, oats, sunflower, triticale, forage, pasture seeds and grain legumes. KSC has a monopoly position in the production of hybrid maize seed. Together with the ADC, KSC established Seed Driers to dry the seeds before packaging. The takeover of Simpson and Whitelaw in 1978 was intended to increase the capacity of KSC in seed marketing. The acquisition of Hortiseed Ltd, now a full subsidiary of KSC, had the intention of strengthening its activities in horticultural seed production. The first task of the KSC is to produce seeds for the national market. The company also exports seeds to other countries in Eastern and Central Africa as well as Denmark and Britain.

3.3.3. Import regulations

Kenya has, like other African countries, an agricultural economy depending on imports to satisfy the internal demand for agricultural production inputs. Fertilizers, agricultural implements (tractors, combines) and agro-chemicals are 100% imported agricultural production factors. Local manufacturing companies only produce inputs such as improved seeds (hybrid maize, seed wheat, hortiseeds), hand tools and ox ploughs. Ideal Casement Ltd, Agricultural Implement Manufacturers and Agritool Industries Ltd are the major local producers of farm implements for both the internal market and for export to other African countries. Some of the hand tools (such as *panga*, *jembes*, *fork jembes*) which appear on the local market are nevertheless British- and Chinese-made products.⁴⁵

Controlling the import of agricultural inputs through a licensing allocation system was one of the recommendations of the Havelock Commission which issued a report in 1971, the so-called Havelock Report. This commission was installed in 1969 to review the situation of agricultural inputs. The Working Party found the costs of fertilizers, agricultural machinery and chemicals higher than they need be because of restrictive practices in an oligopolistic distribution network.⁴⁶ Since then, quantities of goods to be imported are determined by the state, who also issues the import licences. Since the deficits on the state's current account have been increasing rapidly from the mid 1970s onwards (see Table 3.3) the imposition of import restrictions had become even more urgent.

In 1974, the state took over all importation of fertilizers, and these were then distributed through a federation of cooperatives. Established firms were denied trade licences and did not distribute government imported fertilizers. In 1976/1977, the state issued licences to four new importers, but not the established importers. In 1977/1978, licences were extended to ten importers including the former importers.⁴⁷

Since 1979/1980 two central state institutions, the OP and the Treasury have played an enormously important role in the allocation of import licences and quantities. They decide which company or cooperative is allowed to import the agricultural inputs. Together with MOALD they decide final fertilizer allocation.⁴⁸ Treasury has, furthermore, a leading role in the co-ordination, procurement and allocation of fertilizer received under bilateral balance-of-payments and import-support programmes. The shipment of fertilizer aid, which covers now approx. 50 % of Kenya's fertilizers need, has grown rapidly since the late 1970s.

Various cooperative sales units have been established in the rural areas to provide the farming population with agricultural production inputs. Through the enactment of cooperative laws and related legislation, the government is in clear control of the operations of the cooperative sector (see section 3.3.5).

Apart from cooperatives, various private firms are authorized by the state to import and distribute agricultural production inputs. These local private retail and wholesale companies are of local origin (i.e. Asian- and African-owned companies and family businesses). There was a considerable increase in the rate of Asian company formation in the circulation sphere before World War II. All over Kenya, even in the then still remote areas, *dukas* (shops) were established by Asians. After independence and the enactment of the Trade Licensing Act in 1967, Africans gained access to retail and wholesale trade.

The Kenya Farmer's Union (KFA) has long been the largest distributor of agricultural inputs. In the early 1980s, KFAs market share in fertilizer distribution was over 70 %. The largest proportion of imported fertilizer (i.e. 55 %) is nowadays distributed by the KGGCU and by two private companies MEA Ltd (14 %) and Devji Meghi (9 %). The remaining fertilizers are imported and distributed by the so-called end-users, such as the Murang'a Cooperative Union (who also import agro-chemicals for coffee production) and private and parastatal companies (such as BAT, Kenya Breweries, Brooke Bond Kenya, sugar companies and KTDA). The KGGCU is, furthermore, the main wholesale distributor of maize seed.⁴⁹

The KGGCU is, in its turn, assisted by a myriad of local retailers and shop holders (over 3,000 stockists and recognized dealers) to supply agricultural inputs to the farmers. The role of shops in the distribution of inputs is crucial.⁵⁰

The majority of wholesale companies importing and distributing agricultural machinery (combine-harvester, tractors) are, however, owned by international firms or act as appointed agents of international firms. These firms have taken over local settler input-supplying companies or have established companies with or without partnership with local businessmen. Gailey and Roberts, established in 1905/1906 and now a full subsidiary of Unilever, is an important importer and distributor of agricultural tools and machines.⁵¹

Ford, Massey Ferguson, International Harvester and Same-Corsaro are the main suppliers of mechanized agricultural equipment. Together they handle 70 - 75 % of sales. The KFA (now KGGCU), has for a long time, been importing Claas combine-harvesters from Germany. In mid-1984 within the framework of a national import restriction programme, the Government announced restrictions on the number of agricultural machinery imports as well as that limiting the range of imported machines. Imports of tractors and related implements were to be limited to Ford, International Harvester, Lamborghini, Massey Ferguson and Same-Corsaro, while Claas and Kubota (South Korea) were permitted to import combines.⁵²

Agro-chemicals are imported by appointed dealers and distributors. They formed an association in 1958, the *Pesticide Chemicals Association of Kenya* (PCA). Its objective is to promote the application of chemicals in agriculture and to act as liaison with the government and others. Another objective is the representation of the interests of its members in relation to the importation and use of pesticides. At the moment, about forty firms are members of PCA. A number of reputable international firms such as Shell, Ciba Geigy, Union Carbide, Hoechst and Bayer feature on the membership list for 1985.

3.3.4. Price fixation

Apart from a monopoly marketing and import-licensing position, the state is heavily involved in the fixation of prices. Price fixation occurs at all levels and involves almost all commodities. Consumer prices for food, producer prices, agricultural inputs as well as retail prices and processing prices are fixed by the state. Only prices of agro-chemicals and agricultural equipment are related to market factors.⁵³ Two central state institutions, OP and Treasury undertake together with MOALD the *Annual Price Review*. Certain consumer prices are uniform (for milk), for others (such as grains) prices vary according to transport costs. The marketing boards for Kenya's export commodities (coffee, tea, pyrethrum) determine the producer prices. The prices paid to the producers are, in their turn, determined by international terms of trade for the commodity concerned.

To stimulate the rate of increase of fertilizer application, the state decided to subsidize fertilizer purchase prices. Depending on the type of fertilizer used, the subsidy entailed between 4.4 and 14 % of the retail price. Consumption and imports of fertilizer increased considerably. The subsidies on fertilizer were cut by 50 % in 1972/1973. They were reduced even further in 1976⁵⁴ and finally completely withdrawn in 1978/1979.

3.3.5. Cooperative movement

The cooperative movement is viewed as an essential ingredient of Kenya's post-independence development strategy. In the White Paper of 1965, cooperatives were perceived as the means to 'establish a socialist basis'. The basic principle has been that cooperatives should 'compete unhindered on an equal basis with other state and private business organizations'.⁵⁵ They are crucial vehicles in the implementation of state agricultural policy. They have all been sanctioned with crucial functions in marketing, credit supply to members, input distribution and importation of crucial inputs. The operation of all kinds of cooperatives is supervised and assisted by the Ministry of

Table 3.4. Share of cooperatives in marketed production 1979-1988

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Coffee	58	58	64	61	56	60	70	57	60	64
Dairy*	32	43	54	54	93	96	72	78	81	81
Pyrethrum	59	60	60	80	59	87	41	40	46	48
Sugar-cane	7	7	6	20	62	63	48	63	64	64
Cotton	86	91	78	79	95	95	95	100	100	100

* mainly local and regional farmer unions delivering smallholder milk to KCC-factories

Source: Economic Survey (1983, 1986, 1989)

Cooperative Development. That ministry was formed in 1974 and performs its role laid down in the Cooperative Society Act.

The history of cooperative development goes back to the colonial period when white settlers formed several country-wide marketing and input-supply organizations. After independence, a great number of so-called Farm Purchase Societies were formed. Through these societies, members could purchase settler-owned large-scale farms. This kind of land ownership transfer was promoted by the state. The state neglected, however, to assist these societies in the running of these newly acquired farms. The result was that most of these farms were subdivided illegally among the members. Today government policy is to intervene directly in the subdivision of these cooperative farms.

In addition to country-wide marketing cooperatives, smallholders were encouraged to form marketing cooperatives. Actually, the marketing cooperatives were formed under pressure from the state. Membership of a marketing cooperative is obligatory. They are compulsory for smallholder farmers marketing coffee, pyrethrum and dairy produce.⁵⁶ Large farmers, on the other hand, may operate outside these cooperatives and supply directly to the responsible board or intermediate agency. As a result of this, the number of smallholder producer and marketing cooperatives has more than doubled in the period from independence to 1988; membership increased substantially in the same period.⁵⁷

The cooperative movement ranges today from giant savings and credit cooperatives to small-farmer production and marketing cooperative societies and farmer unions. The role of both small farmer marketing cooperatives and local and regional farmer unions is essential to circulation. They act as licensed traders of the various marketing boards and other authorized traders, some even as processors of primary produce. In this function, the marketing cooperatives and unions act as mediator between primarily smallholder producers and the state-owned marketing boards and the world market. Their share in the marketing of coffee, dairy produce, sugar-cane, pyrethrum and cotton is considerable as can be seen in Table 3.4. Other marketing cooperatives do not play a significant role.

Cooperatives and unions are organized on local and/or district bases as well as country-wide. The smallholder marketing cooperatives are primarily district level organizations. The country-wide category includes the Kenya Cooperative Creameries (KCC for dairy products),⁵⁸ Kenya Planter Cooperative Union (KPCU coffee processing and marketing), Cooperative

Bank of Kenya (banking institution for cooperatives) and the KGGCU (purchaser of grains and input supply) and the Horticultural Cooperative Union. The KGGCU was launched by President Moi on June 4, 1984, with the objective of establishing a state controlled, country-wide cooperative body to purchase grains and particularly to improve grain marketing and input supply conditions in the country. The role of the KGGCU in input distribution has been set out earlier. As President Moi ordered a merger between KFA and KGGCU⁵⁹ in 1985, this cooperative became the largest single distributor of agricultural inputs. KGGCU increased its activities after the merger and opened up various new branches in districts not previously served by the now defunct KFA. KGGCU alone now runs over 50 branches throughout Kenya. KGGCU depots can be found in almost every district in Kenya's major agricultural zones and are mostly located in the larger towns or administrative centres.

3.4. The role of foreign aid in the implementation of policy

Since independence in 1963, foreign aid from both multi- and bilateral sources has become increasingly important in Kenya. Kenya has both been offered and has asked for numerous development projects, import support, capital and technical assistance. The bulk of foreign aid is channelled into agriculture to establish the conditions for commodity production in agriculture. The Government of Kenya receives substantial foreign assistance in irrigation, marketing and transport of food, building of storage facilities, livestock and crop development, health and education.

The aim of this section is merely to show that foreign aid plays an important role in the implementation of policy. Kenya is successful in generating aid for its development plans. An overview of aid flows indicates where aid is channelled. It is neither intended nor pretended to analyze here the effects of aid in Kenya.

Chapter 2 emphasized the trend in agricultural commodity production and the increased participation of African producers at the end of the colonial period. It was not unreasonable to expect that in the coming decades there would be a growing demand for important agricultural inputs (fertilizers, machines, pesticides, etc). The majority of these inputs are not produced in Kenya. It became clear to the newly independent government that securing the importation of these essential inputs as well as the financing of the completion and further development of the technological infrastructure for farming was vital for the economic development of the country. At independence, agronomic research on maize and seed testing and certification was still in its infancy. The administration became conscious of the fact that the pursuit of its general economic aims, carefully set out in *African Socialism and its Application to Planning in Kenya*, could not be financed by resorting to the country's own financial and technical resources. The newly introduced four-year economic planning policy and subsequent budgeting of recurrent cost method revealed that the Kenya government could only cover 75 to 80 % of this budget.

The state, therefore, was increasingly looking for alternative and convenient sources of financial as well as technical assistance. After independence, the government lead by Kenya's first president Jomo Kenyatta - and after his death in 1978 by his successor President Daniel arap Moi - pursued a foreign policy to attain this objective. The new administration in

Nairobi was concerned with establishing its economic and political status by diversifying its range of external relations which had hitherto been dominated by well-established economic and political links with the former colonial master, Great Britain

The attempts to diversify its external relations, however, did not prevent Great Britain remaining the leading donor country until 1972. Great Britain's relative importance as a donor has, quite naturally, declined since independence. In 1964, well over 80 % of all Kenya's official aid receipts came from the UK, compared with under a half of aid gross, and 22.6 % of aid net of amortization, in 1972.⁶⁰ The dominance of a single donor has declined since then.

Many different states and international aid institutions (such as the World Bank groups, IBRD and IDA, which are on top of the list) started to give aid to Kenya. The contribution of British aid declined to 16 % of total bilateral aid in 1981/1982. The Federal Republic of Germany and the United States have remained significant donors for much of the post-independence period. In the early seventies, the Nordic countries (Sweden, Norway, Denmark, Finland) and the Netherlands emerged as important bilateral donors. In the same period, aid from multilateral sources increased rapidly.⁶¹

Multilateral aid increased more than ninefold between 1974/1975 and 1981/1982. The World Bank groups have been very important donors of financial aid with a tendency in recent years for credits by the IDA to decline in importance compared with IBRD lending, so hardening the terms of multilateral aid to Kenya. During the 1980s, IMF loans and structural adjustment loans from the World Bank became indispensable phenomena in the state's financial management.⁶²

Although Kenya has attempted to diversify her external sources of capital for development, the major sources still continue to be in the West. Aid from the Eastern European countries is very small - virtually negligible.⁶³

The evolution of development cooperation arrangements with donor countries other than Great Britain, such as the Federal Republic of Germany, the Netherlands, USA, Nordic countries and World Bank groups, was seen as part of a wider liberation and nation-building process, a political factor greatly facilitating the initial conduct of aid negotiations with the new Kenyan administration. The first aid negotiations made clear to the donor countries that the architects of Kenya's development programmes were fully prepared to use foreign technology, capital and personnel, where these could be used to the national economic advantage and to strengthen the economic infrastructure of the country.⁶⁴ Aid and technical assistance are welcome because they mean that 'development here need not be limited quite so severely by the shortage of domestic savings and education', but aid will not be welcomed 'if it is designed to promote the economic or political dominance of the aiding country'.⁶⁵ This strong commitment and the relatively strong and stable administration in Nairobi, was the starting point for many donor countries to initiate foreign aid arrangements and programmes in Kenya. From independence up to the mid 1970s, foreign aid was around 12-15 % of total government expenditure.⁶⁶ The rest of the budget shortage shortfall was covered by commercial lending from international bank consortia. After 1979, the dependence on foreign aid and external loan finance increased considerably. Treasury estimates that the contribution of foreign aid for the

financial year 1989/1990 stands at 28 % of total government expenditure (see Table 3 3)

3.4.1. The evolution of foreign aid arrangements and allocation⁶⁷

Technical and programme assistance, commodity aid and financial aid (loans and grants) are the dominant forms of aid from the international community to Kenya. In the beginning, technical assistance and financial aid were the most important forms. Capital or financial aid has become since then a more important form of aid than technical assistance. The grant element in financial aid flows is increasing, particularly since the mid 1970s, i.e., after the so-called 'oil-crisis' with its disastrous effect on Kenya's balance-of-payments and the worsening in terms of Kenya's agricultural trade. In the period 1971-1974, the grant element averaged 83 % of total aid. After 1974, the proportion increased to 90 %.⁶⁸ At the same time, the proportion of 'soft' loans (interest rates less than 3 %) declined from 44.2 % in 1970 to 36 % in 1979. 'Hard' loans (interest rates more than 9 %) rose from 0.5 % to 9.5 % over the same period.⁶⁹

During the same period, (tied) commodity aid, often in the form of balance-of-payments and import support, emerged also as an important form of foreign aid to Kenya. The aid-to-imports ratio increased from 6.3 % in the 1970s to 36.9 % in 1980. In 1984 the ratio declined to 16.3 % and to 11.2 % in 1986. The decline in the aid-to-import ratio was, however, largely induced by declining loans and grants as well as being due albeit to a much lesser extent to import restriction programmes of the state. Due to increased borrowing from abroad the ratio increased to 34.4 % in 1988.⁷⁰

Technical assistance was found to be greatly needed in the administration of aid as well as education and training. The bulk of technical-assistance funds was spent on expatriates. The proportion of aid spent on technical assistance annually averaged 47 % between 1970 and 1980. A policy of Kenyanization has been pursued since independence and has gradually led to a diminution in the need for foreign expertise. In 1985 there were reportedly 9,039 expatriates in Kenya of whom 6,967 worked in the private sector, 1,225 under Teachers' Service Commission, 451 in the civil service and 200 elsewhere in public institutions. This represented a decline from 18,000 in 1977 and 12,000 in 1982.⁷¹ Reckoned in money, however, the total value increases after 1974.⁷² This implies that there are more relatively low-paid expatriates and fewer highly paid expert advisers.

British capital aid (as loans and/or gifts) to Kenya has gone mostly into the Land Transfer Programme or into land adjudication and registration. Since 1964 over half of British capital aid has been for land transfer, settlement and adjudication. British aid to Kenya immediately after independence was used a.o. to pay off the white settlers. A second pole of British aid was the financing of smallholder commodity schemes (tea in particular). The Colonial Development Corporation, now the Commonwealth Development Corporation (CDC) appears as a leading financier of tea production schemes in Kenya since the early 1950s. Furthermore, as a response to the Governments shopping list of aid requirements, mainly for capital equipment, British aid went into road building, the sugar industry, afforestation and livestock marketing schemes, grain storage and education. Over the early post-independence period (up to the mid seventies) the sectorial breakdown by value of British general development aid disbursements was: agriculture 17

%; processing agricultural products 23 %; physical infrastructure, 32 %; social services 25 %; other 3%. If the Land Transfer Programme and land adjudication programmes are counted as assistance for agriculture, however, total aid tot that sector is 59 % of gross capital aid.⁷³

The US is an important donor for Kenya. US aid began in 1951 when the United States and Britain signed a general agreement for technical cooperation in colonial Kenya. From 1953 to 1984, the total aid flow (including loans and grants) was US\$ 1,619.7 million including military assistance of US\$ 245.2 million.⁷⁴ The bulk of US economic aid to Kenya, particularly between 1962 and 1972, was either technical assistance, small commodity grants supporting technical assistance or food aid.⁷⁵ Aid went overwhelming to the agricultural sector. After 1972, the US became a more active donor. Technical assistance has continued at roughly the same levels with back-up in the form of vehicles and other equipment. Teams of advisers were operating in such areas as livestock and range development, agricultural credit administration, rural development and family planning.

Recently, the USAID shifted from the public sector to place more emphasis on the development of the private sector.⁷⁶ Military aid continued at the same pace as during the first 30 years of US development assistance to Kenya. Kenya is among the largest African recipient of aid from the US. The build-up of food imports (maize primarily) and balance-of-payments support from the US in the form of aid and the build-up of military aid, raises the question of Kenya as a client state of the US. Kenya represents for the US a suitable country in US' geo-political objectives. Kenya offers military facilities for US Rapid Deployment Forces.

West Germany also supports Kenya's development endeavours by offering capital aid and technical assistance. All German capital aid is loan aid while technical assistance is grant aid. The sectorial distribution of West German capital aid to Kenya is as follows: the sugar industry: 20 % (completely spent on the construction of the Chemilil sugar factory); the tourist industry: 20 % (mainly 'tourist' roads); industrial and commercial development: 13 % (financing industrial estates in Nairobi, Nakuru and Mombasa). In the agricultural field, nearly 8 % of total capital aid commitments have been in rice cultivation projects, and further sums have been committed for a pilot irrigation scheme and for a scheme to provide credit to small farmers. In earlier years, West Germany provided money for the promotion of tea-growing. Water supply and sewerage are also fields to which West Germany appeared attracted. The sectorial breakdown of technical assistance shows that much the higher proportion has gone into agriculture.

Swedish aid to Kenya shows the following sectorial distribution for the 1964-1975 period: public administration and other services: 35.3 %; agriculture: 25 %; education: 18 %; water and power supply: 10.7 %. The 1974 disbursement pattern was: agriculture 22 %; education 19 %; health, including family planning, 15 %; rural water 13 %; import financing 10 %. Most Swedish aid comprised loans on very soft terms; recently, grants are increasing and loans are extended interest free. Capital aid as well as technical assistance is untied. Like the US, the Netherlands and Great Britain, Sweden frequently provides balance-of-payments loans to counteract the deterioration in the world economic situation. Sweden became the largest single donor to Kenya in 1980/1981, providing 21 % of total bilateral aid.

The World Bank group has long been one of the largest donors to Kenya. Between independence and 1975, it had committed US\$ 144.8 million in IBRD loans, US\$ 122.8 million in IDA credits and US\$ 25.9 in IFC investments. Much of this investment has been in large capital-intensive projects and continues to be so, although the Bank now lays emphasis on rural development. Less than a fifth of commitments were to agriculture. The patterns changed after 1974 marking the World Bank's change in attitude and policy orientation. Since then, aid flows increasingly went to rural-based enterprises and agricultural research projects and programmes. In addition, financing the expansion of smallholder tea production schemes became an important ingredient of World Bank policy in Kenya. During the period 1970-1978, the World Bank became Kenya's leading donor, providing some 25 % of the total aid flows. Since 1980, the Bank has provided 35.8 % of all donor assistance to Kenya.⁷⁷

The Netherlands has committed itself as a foreign aid donor since independence. A review of more than 25 years of Dutch aid to Kenya shows that the largest share of aid went into agriculture. The bulk of aid in agriculture was in its turn, mainly directed to the further development of the technological and physical infrastructure for agricultural production in Kenya.⁷⁸ Much attention is being paid to increasing the efficiency of input production as well as the supply of inputs.

The first major achievement of Dutch aid was assistance towards the establishment of the National Seed Quality Control Service (NSQCS) in 1965 and the accompanying cooperation with the enactment of a new Seed Law. The NSQCS project (known as 'Seed Certification Unit' or 'Seed Unit') terminated in 1987. Contributions to the NSQCS from 1987-1984 represented approx. 3 % of total Dutch aid to Kenya. Since then, Dutch aid for research and development has been channelled through KARI. The improvement and expansion of agricultural education facilities, agricultural research and the provision of credit to the agricultural population have always been sectors to which the Netherlands allocated aid. Dutch aid assisted a.o., within this policy framework, the Soil Survey Unit, the Faculty of Agriculture of the University of Nairobi, Coffee Selection and Breeding programme and the Grain Legume and Dry Beans project.

Dutch assistance to Kenya's National Dairy Development Programme (DDP) must also be interpreted within this framework. Since DDP started in 1980, the Dutch Government has contributed 21 million Dfl. Half of this amount is earmarked for personnel costs; 12.8 % is set aside for fellowships and education courses.⁷⁹ A similar project is the National Poultry Development Programme.

Another major receiver of Dutch commodity aid was the government-run Tractor Hire Service (9 million Dfl during 1975-1980). Irrigation received about 6.5 % of total Dutch aid during 1977-1980. The Dutch Government is, together with the United States, Japan, Norway and Denmark, an important fertilizer donor for Kenya. The terms for fertilizer import support are rather different, however.⁸⁰ The bulk of Dutch balance of payment support was used to finance the import of fertilizer. Fertilizer import support started in the mid-1970s and totalled 138 million Dfl (i.e. approx. 35 % of total Dutch aid to Kenya during 1975-1985). Another major aim of Dutch aid is to provide funds to upgrade the physical infrastructure, i.e., support for rural access roads, water supply, extension services and communications.

An overall view of aid to Kenya shows two important trends. Capital aid disbursements, commodity aid and technical assistance are rather unequally spread over the sectors of the economy. It is not surprising that agriculture received about a quarter of total aid. Transport and communications and the development of water resources received 18 % and 11 % respectively. Energy development, balance-of-payments support and education and training took up about 7 % of the total aid allocation. The remainder is scattered among eight other sectors.⁸¹

Foreign aid to agriculture was generally spent on the further development of the administrative, technological and physical structure supporting agricultural production and productivity in particular. Apart from agricultural R&D programmes and road construction, the financing of smallholder commodity production schemes is of particular relevance of foreign aid to Kenya. The loan proportion in the expansion of tea and vegetable oil production schemes is large. In tea production, it is on average approx. 50 % and in some years even higher. In 1974/1975 the loan proportion was 81 %; and 77 % and 86 % in 1979/1980 and 1980/1981 respectively, when new expansion plans were implemented.⁸²

A second apparent fact about foreign aid to Kenya is the discrepancy between committed aid and the actual disbursements by donors. Since the mid 1970s, the disbursement ratio has been declining. The average ratio is just over 50 %.⁸³ That the ratio is declining may be explained by a combination of several factors. There is an increasing pressure on the state by donors to contribute to local project costs (transport, fuel, local expertise). Donor-imposed conditionalities to finance recurrent costs contribute to the delay of some projects. Given the financial position of the state, recurrent costs financing is restraining implementation. Frequent under-estimation of project costs also increases the difficulties of implementation.⁸⁴ In addition, aid-tying may force the country to select import-intensive projects absorbing a large proportion of recurrent costs after the project is terminated. The negative effects of aid-tying are real, since almost all donors specify that at least 25 % of aid is tied. Furthermore, not more than 30 % of donor aid is available for local-cost financing.⁸⁵

3.5. Conclusions

This chapter delineated the main policy objectives of state intervention in agriculture as being to modernize the agricultural economy in such a way that self-sufficiency in food and industrial crops is attained; that the agricultural sector continues to generate foreign exchange earnings; and that the agricultural sector continues to be the major source of new jobs for the rapidly growing labour force.

The role of the state is to define and formulate policies and to create an administrative, physical and technological structure favourable for their implementation. The technological core of agricultural policy is the raising of productivity of land and farm labour. Agricultural R&D and the promotion and use of modern inputs by various state institutions is essential. The crux of Kenya's agricultural policy hinges, thus, around qualitative and quantitative changes in agriculture with a view to promoting agricultural growth and development. Credit supply, extension service and private land ownership are viewed as the means to facilitate capitalization of production which would

trigger off agricultural growth. Private land tenure in particular is perceived as the way to internalize the benefits of growth. In addition, commercialization of production and the expansion of commodity relations rather than subsistence production is envisaged as crucial. For these reasons, the state is highly committed to the operation of various commodity - import and export, input and output - markets. The state is in other words omnipotent.

The realization of these objectives requires the commitment and active participation of the state, the private and cooperative sectors - as manufacturers, land-owners, traders and distributors, processors and consumers - and foreign aid agencies.

In its endeavours to implement policy, the state strongly regulates and supervises the private and cooperative sector. The nature of state involvement in Kenya as can be seen in Figure 3.1, varies by sub-sector as well as by production inputs and agricultural commodities. There is a high degree of intervention in pricing of fertilizers and livestock products, while only import regulations are imposed on pesticides, machinery and equipment with no interference in price setting. Licences for companies to import fertilizers, pesticides and machinery are issued by the state. Production and pricing of maize seeds are heavily and directly controlled by the state. In addition, the state fixes consumer prices, producer prices and retail prices as well as the profit margins of industrial processing and local production of agricultural implements. The Office of the President and Treasury come forth in many respects as the two most central state institutions in Kenya.

Commodification and institutionalization through state intervention may thus be considered as the basic processes structuring agricultural production as well as the driving force behind the formation of an agrarian structure in Kenya. The colonial roots of the policy objectives and the motor force of development are obvious. The administrative and technological foundation upon which commodity production for the national and international market could expand was already laid down from the time the colonial state implemented far reaching reforms in the 1950s. The post-colonial state continued to implement this policy.

The overview of policy objectives also highlighted three other important facts. *In the first place*, the euphoria after *Uhuru* and the high run expectations the various classes and groups had of the new state, were supported by extremely favourable economic conditions. The conditions deteriorated dramatically, however, in the late 1970s as the international terms of exchange shifted decidedly against the country. The financial conditions for policy implementation deteriorated with it. The limitations placed upon an export/import oriented development strategy became increasingly overt.

In the second place, in relation to the first aspect, macro-economic objectives such as debt management and dealing with the steadily increasing deficits on the state balance-of-payments current account, also became an overriding criterion for policy development. Furthermore, improving the efficiency of state intervention in agriculture may also be put forward as an essential objective. These objectives are closely tied to the objectives of increasing export commodity production and attaining self-sufficiency in food and industrial crops.

In the third place, the overview pointed to various serious shortcomings in the agrarian structure which need special attention of the state. The National

Food Policy paper indicated a o that current land tenure systems proved to be inappropriate, that marketing, and particularly food marketing, is ineffective. The Development Plan 1979-1983 is quite frank about the wide spread incidences of poverty in the rural areas. In addition, the agricultural research and dissemination system has to face serious challenges in order to force a breakthrough in crop and husbandry improvement.

Notes

- 1 Mohuddin (1981), pp.28, 29
- 2 World Bank (1963), p. 301 ff
- 3 See Smith (1976), p. 131, and Mohiddin (1981), p. 34
- 4 Quoted in Mohiddin (1981), p. 76
- 5 See Sessional paper No. 4 (1981), Ndegwa Commission Report (1982) and Sessional Paper No. 1 (1986)
- 6 Modernization theory labels this as 'institutional innovation' necessary to induce agricultural development. See, for instance, Ruttan & Hayami (1984) p. 67. They refer in their article to the effect of the Enclosure Movements in England during the 18th century. 'The issuance of the Enclosure Bill facilitated the conversion of communal pasture and farmland into single, private farm units, thus encouraging the introduction of an integrated crop-livestock 'new husbandry system'.' There is no doubt the Swynnerton Plan was based on this experience.
- 7 See a o Swynnerton (1954) and Smith (1976), pp. 126-136
- 8 See a o Lamb (1977a), pp. 51-54
- 9 Figure from World Development Reports various years
- 10 Figures are calculated from Statistical Abstracts and Economic Surveys, various years, and *World Development Reports*, various years
- 11 World Development Report 1989, p. 166
- 12 Industrial Survey (1972, 1977) see also Directory of Industries (1974, 1977)
- 13 See Statistical Abstracts, various years, tables on production of some important foodstuffs (maize meal, wheat flour, rice, bread, salt, cooking oil, etc.)
- 14 See Sharpley (1988), pp. 23-25
- 15 For a detailed account of the period before 1978, see Ikara & Killick and Killick & Thorne, in Killick (1981)
- 16 See World Development Report 1989, tables 11 and 12, pp. 184-188
- 17 See a o Killick (1984)
- 18 See Cowen (1986), p. 368 and Economic Survey (1973, 1989), tables 10.5 and 6.14
- 19 Financial Times, 18-10-1989
- 20 Financial Times, 16-6-1989
- 21 It is unknown to what extent the president and cabinet ministers are involved in designing Development Plans. According to Killick (1981, p. 106) members of the Moi-cabinet are more involved in preparing Development Plans than the Kenyatta-cabinet was. In any case, the majority of planners involved were expatriate advisers. Provincial and District Development Plans are designed by provincial and district level planners. Provincial- and district commissioners (PCs and DCs) and various committees are involved in translating national targets to provincial and district level.
- 22 See Development Plan 1979-1983, in Killick (1981), pp. 90 - 97
- 23 Ibid pp. 91, ff and Killick (1981), p. 99
- 24 Killick (1981), p. 100
- 25 Killick (1981), p. 99
- 26 The Ndegwa Commission, appointed in 1982 by President Moi to identify ways and means to increase productivity and efficiency in government operations, emphasized this aspect quite clearly.
- 27 Quoted in Killick (1981), p. 103
- 28 Development Plan 1979-1983, p. 93. The need to develop appropriate technology for the small farm sector was identified as the greatest challenge for Kenya's research system.
- 29 See a o Sessional Paper No. 4 (1981), p. 3, see also African Business, August (1986) and Cox (1984)

- 30 Sessional Paper No 4 (1981), pp 13, 14
- 31 Ibid p 37
- 32 Sessional Paper No 4 (1981), pp 16, 17
- 33 Ibid , p 18, 19
- 34 Fifth Development Plan 1984-1988, pp 182, 183
- 35 Sessional Paper No 4 (1981), p 23
- 36 Ibid , p 24
- 37 This was also advocated by the influential Ndegwa Commission (1982) The history of district level planning can be traced back to administrative reform in the mid 1960s when Kenyatta mapped out the new role for provincial administration See a o Makokha (1985) for the history of the district focus, and also Ergas (1982) and Oyugi (1981) Several interpretations of the intention of the District Focus can be found in the literature While Makokha (1985) and Oyugi (1981) stress that it provides a real contribution for local participation in the development decision making process, Swainson (1980) emphasized that Kenyatta and his cabinet gained full control over provincial and district affairs. Kitching (1985) sees the District Focus as a vehicle to accelerate the transition to capitalism in the countryside In their view, we cannot speak of decentralization of decision making, but rather of the opposite concentration of decision-making to facilitate capitalist expansion
- 38 Brown (1968), pp 79, 80
- 39 After independence, the ADC purchased from settlers large-scale mixed farms in the northern part of the White Highlands and ranches (one of these is 20,000 ha) in the dryer areas
- 40 Ndegwa Commission Report (1982), p 40
- 41 Ibid , p 40
- 42 African Business, March 1986
- 43 Arap Tum (1987), p 2 and Ndegwa Report (1982)
- 44 KSC works with carefully selected outgrowers to produce hybrid and other varieties of maize 40% of maize seed is produced on ADC owned farms (in Endebeess in Trans Nzoia district) The KSC owns a farm of 1,500 ha , also in Endebeess. The rest of the maize is produced on private, large-scale farms
- 45 Ibid , Annex IX, p 9 The importation of hand tools is prohibited, despite that they are readily available through smuggling
- 46 Heyer (1976), p 352
- 47 Ruigu, G et al (1985), pp 6-9
- 48 According to AIR/World Bank, annex VIII, p 1 the practice of the annual price review for seed is not effective and not practised at all
- 49 See AIR/World Bank (1985), several volumes and annexes.
- 50 See AIR/World Bank (1985) Annex VII and Annex V
- 51 Apart from Asians, white settlers too invested in wholesale trade Settlers such as Gaily and Roberts, who had been surveyors employed by the Uganda Railway Cooperation, established in 1905/1906 a company (Gaily & Roberts) for the import of agricultural tools and equipment The company has grown rapidly since then One of its chief suppliers was the United Africa Company (UAC) which is a full subsidiary of Unilever By the mid 1930s more capital was needed to expand operations In 1937 Gaily & Roberts company was taken over by UAC In this form, Gaily & Roberts is still operating in Kenya See Swainson (1980), pp 58-63 Another input supplying settler company, the seed merchant Simpson & Whitelaw, was taken over in the same period by Michael Cotts, a British trading giant Simpson & Whitelaw was taken over by the KSC in 1978
- 52 See AIR/World Bank (1985), annex IX
- 53 Ibid Vol I, main report
- 54 Ruigu et al (1985), p 6
- 55 Bager (1980), p 23
- 56 Heyer (1976), p 319 and Bager (1980), p 22
- 57 See Bager (1980), pp 25, 26 and Economic Survey (1983), pp 29 ff
- 58 According to Heyer (1976), p 331 it is more accurate to assign the KCC to the marketing boards category
- 59 While the KGGCU's history is only recent, KFA's origins go back to the early days in colonial history (see Chapter 2) The KFA-KGGCU merger meant that the young, less experienced, and much smaller KGGCU took over all the assets of the much larger KFA The

ideological ground was cleared for a merger between the two organizations KFA was accused by the press as well as by KGGCU officials of operating at a financial disadvantage to farmers and of adopting colonial policies which were not in conformity with Kenya's development targets See a o Weekly Review, August 3, (1984), May 31 and June 7 (1985)

60 Holtham & Hazlewood (1976), p 49

61 Ibid , p 49 and Momanyi (1982), p 96

62 Ibid See also Killick (1984) and Economic Survey, various years

63 See a o Miller (1984), p 140, Ikiara & Killick (1981), p 6 and Mohidin (1981)

64 See a o Kenya Country Study of Norwegian Aid Review, 1987

65 Sessional Paper no 10 of 1965, para 25

66 Holtham & Hazlewood (1976), p 52

67 The overview of aid arrangements for Kenya is mainly based on Holtham & Hazlewood (1976) Their review and assessment stops at 1974/1975 The source of new and other recent developments in Kenya's aid relations and sectorial distribution, will be given Momanyi (1982) provides an overview of European aid to Kenya in the period 1974-1981

68 Momanyi (1982), p 85

69 Ibid , p 89

70 Ibid and Economic Survey (1984, 1987, 1989) The aid-to-import ratio is calculated by dividing the total of loans and grants (obtained from the tables on 'Financing of Capital Formation' in the Economic Survey) by imports (obtained from the tables on 'Total Imports by Broad Economic category' in the Economic Survey)

71 Norwegian Aid Review (1987), p 186, 187

72 Momanyi (1982), pp 85, 102

73 Holtham & Hazlewood (1976), p 54

74 Miller (1984), pp 141, 142

75 Under the so-called Public Law 480, titles I (loans) and II (grants) It is also known under the heading 'Food for Peace'

76 USAID, Nairobi office, interview August 1985

77 Miller (1984), p 141

78 The sources for the data are *Projektljsten* (1970-1981) several volumes (issued by Ministry of Foreign Affairs (DGIS)) The data for Kenya were compiled by Scheffer (1985) See also Dietz & Koninx (1983)

79 DDP data from IOV (1988), pp 130 ff See also DDP evaluation report (1986)

80 The Netherlands offer fertilizers in the form of balance-of-payments support and the distribution is left to the Kenyan Government, while Denmark requires a guarantee that it is mainly distributed among small farmers, USAID, on the other hand, demands that the fertilizers be distributed by the private sector in Kenya Fertilizer allocations under aid programmes have been criticized by the World Bank In the past, uncertainties were created about quantity and quality as well as time of arrival See a o AIR/World Bank (1985) and Ruigu et al (1985)

81 Momanyi (1982), p 100

82 Cowen (1986), p 373

83 Momanyi (1982), pp 109-112

84 One reason why projects overrun estimated figures is due to the tendency for projects to contain a large proportion of foreign currency in total outlays The effects of inflation and devaluation of the national currency against the US Dollar reinforce this tendency Increasing costs are caused by high(er) fees for foreign consultants and inappropriate designing The best example of a capital-intensive and foreign exchange-intensive development projects in Kenya is the Bura Irrigation Scheme Construction costs per irrigated area rose more than twofold due to inappropriate designing by consultants (De Leeuw 1985, 1986) In addition, recurrent costs (financed by the state) contain a large element of foreign exchange Capital investment by a o the World Bank and the Dutch government, amounted to US\$ 400 million (African Business, April 1986) The Bura Scheme finally gave 5,504 households access to 2,150 ha irrigated land (Statistical Abstract, 1988, table 87) Both the state and donors acknowledged in the end that Bura was a failure

85 Momanyi (1982), p 108 Aid is often tied by donors who argue that it will maximize the benefits to the two parties involved For a discussion of tied-aid see Hoejbink (1988)

Introduction

The previous chapter outlined the policy objectives and the instruments and policy terrains of agricultural policy in Kenya since the post-war reforms were implemented. In this chapter, we shall examine the general effect of these instruments on agricultural developments, i.e., what kind of developments were set in train by the implementation of state policy.

The immediate consequence of the post-war reforms was a phenomenal expansion of commodity production for international and national markets. Table 3.1 in Chapter 3 displays this clearly. Production of nearly all marketed agricultural commodities doubled, trebled or increased on an even greater scale between 1950 and 1988. Agricultural production growth rates were extraordinary. The economy as a whole expanded as a result.

This chapter elaborates the directions, specific forms and rhythms of agrarian change generated in Kenya since the reforms were implemented in the 1950s and particularly since independence. The remarkable economic success in the period immediately after independence was fuelled by the agrarian revolution proclaimed by the colonial state and further implemented by the independent state. Various aspects of the agrarian revolution contribute to the expansion of commodity production. The registration and consolidation of holdings and private land tenureship and the implementation of land transfer programmes are generally portrayed as important elements stimulating agricultural development. A general expansion of cultivated area and the related lifting of crop restrictions on high value commodities, the integration of numerous small-scale household producers in export production schemes and their market oriented farming strategies may also be conceived as an important driving force. A third component explaining the high growth rates is the process of technology transfer to the agricultural sector. Various state institutions facilitated the commercialization of production as well as the transfer of new productivity-enhancing technologies in agriculture and secured their adoption by the farming population. An administrative and technological infrastructure was created by the state providing the conditions which triggered off agricultural growth. In the course of the process of commoditization, however, glaring differentials in the rate of development between regions as well as between people began to emerge.

This chapter is composed as follows. It will examine in brief the effect of the process of land transfer after independence. Land reform unleashed a considerable expansion of commodity production. The reform process must also be considered as one of the mechanisms reproducing the bimodal, colonial agrarian structure in the country. After that we shall examine the directions of smallholder and large farm production. Technology transfer to the agricultural sector in general will be highlighted in section 4. The last section is a detailed examination of the processes underlying regional and

socio-economic differentiation. This section on socio-economic differentiation reviews the available data on distribution of land and income in the country and delineates, at the same time, the structure of smallholder agriculture. This review raises doubts about the distinction between a large and small farm sector which is frequently applied in state documents as well as in this chapter.

4.1. The land question and land reform

The land reforms envisaged in the Swynnerton Plan of 1954, and implemented further after the transfer of state power in 1963, is an important ingredient of post-colonial developments. The land reforms laid down the essential feature of Kenya's contemporary agrarian structure: private property rights to land on the one hand and the maintenance of the so-called large farm and small farm sector on the other. In this respect it is not surprising that the Central Bureau of Statistics (CBS) still keeps separate statistical records.¹

The effect of the land reform was twofold. It unleashed a considerable expansion of production. It is safe to assume that the land tenure reform has been one of the factors contributing to increased smallholder productivity and income. The automatically asserted positive association between the implementation of the land tenure reform and the dramatic expansion of commodity production after the 1950s is severely questioned, however. Heyer (1976), for instance, is quite definite about this: '(...) there is little to show that the production increases of the 1950s and the 1960s were attributable in any way to the land reform programme. They were much more clearly the result of the relaxation of restrictions on cash crops and the keeping of dairy cattle.'²

The prime target of the immediate post-independence land transfer policies was the maintenance of the estate or large farm sector and the settlement of smallholders and the landless. The politico-economic determinants of the land reform will be stipulated in Chapter 8.

After independence, land transfer of the settler farms in the Scheduled Areas in the White Highlands occurred mainly between white settlers and wealthy Africans, simultaneously enlarging the economic base of an indigenous capitalist class in agriculture. Likewise, foreign investment in estate agriculture was closed off by the state. It is estimated by several researchers that at least two-thirds to three-quarter of the fertile White Highlands remained intact as estates and large mixed farms. By 1973, the 3 million ha. of the Scheduled Area was divided as follows: 0.9 million ha. of 'mixed' farms or estates (i.e. maize/wheat farming and dairy/meat production) - roughly 1,800 in all - were sold privately and intact to Africans; 1.5 million ha. remained as plantations or estates (coffee, tea, sisal) - numbering 400-500 - and large ranches (extensive dairy farming and stock raising). The remaining 0.6 million ha. of former 'mixed' farms, were turned into relatively small plots under the post-independence land resettlement programmes. By 1977 it is estimated that only 5 % of the mixed farms in the former White Highlands remained in expatriate hands.³

Ownership of the estates lies in the hands of the so-called 'telephone-farmers' (high ranking civil servants, business men and politicians straddling agriculture and other economic sectors) and a class of wealthy capitalist farmers. Ownership of plantations is confined to a limited number of foreign estate companies and local African capitalists. The latter have started to invest in land and export commodity production, outside the smallholder production

schemes, since independence and some started even before. A number of well known international firms (a.o. Unilever, Socinaf, James Finlay) are still directly involved in the ownership of coffee, tea and sisal estates and processing facilities.⁴

Table 4.1. Number of holdings in the large farm sector, 1954-1987

Holding size group (ha.)	1954	1963	1971	1981	1987*
0 - 49	467	578	741	1185	2086
50 - 399	1162	1288	1253	1431	1339
400 and over	1535	1502	1182	1155	933
total	3164	3368	3176	3771	4358

* provisional figure

Source: Statistical Abstract (1955, 1970, 1980, 1988)

This table displays the trend towards division of the large farm sector into smaller land holdings.

The form of property acquisition in agriculture was, according to Leys (1978) one of concentration. From 1959 to 1970 between K£ 7 and 10 million of private capital, mostly from the Central Province, was invested in large farm purchase in the White Highlands.⁵ The same applies to foreign owned coffee-farms. By the end of 1977 57.3 % of the total hectareage of foreign owned coffee had been bought by Africans.⁶ This implies, at the same time, was, that a considerable amount of capital must have been accumulated by Africans during the colonial period or that investment of this kind was financed with loans from the Land Bank and later by the AFC. It seems, however, also to have been facilitated by the concentration of commodity production in a few hands. In Murang'a district, for example, 14% of the farmers supplied 64 % of the coffee in 1970. In 1970/1971 in two tea-growing locations in Nyeri district, 20 % of the growers supplied 55 % of the crop (in 1965, 20 % of the growers supplied 64 % of total output).⁷

The rest of settler-owned 'mixed' farm land was turned into relatively small plots in the form of settlement schemes, such as the 'Million Acre Scheme' initiated in 1961, soon followed by the 'Haraka', 'Shirika', 'Harambee' and 'Stateland' schemes. The schemes were implemented with loans provided by Britain, the Commonwealth Development Corporation and the World Bank. The first and main beneficiary of land transfers for smallholder settlement was Central Province.⁸

The settlement schemes were set up as a step to relieve the pressure off demand for land from the landless, to pay off the outgoing settlers and to satisfy the demands for land by the so-called 'yeoman' or 'progressive' farmers. Ethnic sentiments were also part of the settlement process. Kikuyu-settlers were frequently favoured by the settlement schemes at the expense of non-Kikuyu settlers.⁹

The settlement schemes were above all presented as a way to relieve the situation of the landless and poor peasants.¹⁰ The schemes were not planned, however, as a strategy to resolve the rural poverty problem, although poverty undoubtedly has been reduced by settlement policies, since land was provided

for the landless and near landless. Due to subdivision of land in the Scheduled Areas and implementation of various Settlement Schemes in several phases between 1960 and 1982, the amount of resettled land totalled nearly 0.8 million ha. Eighty thousand households gained access to land during that period.¹¹

The settlement programmes affected only about a quarter of the country's best land, only 3 % of total agricultural land in Kenya and only about a twentieth of the country's total population.

In the former Non-Scheduled Areas or Reserves which total 7 million ha. of arable land, there were no land settlement policies planned. Smallholders in the former Reserves were given individual freehold titles to the land. The land tenure reform stimulated the creation of a free land market in the former Reserves. This certainly increased the potential of the rich peasant classes to buy more land and gain easier access to labour. The land reform programmes have significantly altered the pattern of land distribution at the expense of the bottom quartile of the rural population. The situation of land-poor households in the former Reserve areas remained the same as before independence. The situation of tenants has been worsened since the implementation of private land tenure.¹²

The benefits of the land tenure reforms in the non-settlement areas accrued thus only to a small proportion of Kenya's regions and to a minority group of rural producers. To make matters worse, the settlement schemes were favoured in extension and agricultural credit programmes at the expense of the former Reserves. In addition, in some of these schemes farmers were resettled who already owned land in the non-settlement areas. The settlement schemes were used by many farmers to obtain more land.¹³

An important issue relating to the land settlement programme was the nature of the target groups. A famous settlement scheme was the 'Million Acre Scheme' which started in 1961 and was completed in 1971. The initial plans involved the settlement of 1,800 'yeoman' farmer families with targeted incomes of Ksh 5,000/- and 6,000 'peasant' families (or the so-called non-progressive farmers) with a targeted income of Ksh 2,000/-. The scheme contained therefore a high-density and a low-density scheme. In the end, approx. 30,000 peasant households were settled in the high-density scheme and 5,000 yeoman farmers in the low-density scheme. The size of the holdings in the high-density scheme averaged 4 ha. while the low-density scheme holding size averaged 16.2 ha. In practice, the high-density schemes came to be peopled with landless households, many of whose heads had been active in the Mau Mau Rebellion, while the low-density schemes were mainly occupied by households whose heads had considerable off-farm incomes, and who often already had land elsewhere.

From the start, the low-density scheme farmers received preferential treatment in terms of choice and price and quality of land and the establishment of extension services.¹⁴ Despite the bias in government attitude towards the schemes - it was probably assumed that the high-density schemes would fail - economic evaluation by the Statistics Division of the Ministry of Finance and Planning conducted between 1964 and 1968, indicated that the theory proved to be seriously misconceived: the low-density schemes did not outperform the high-density schemes. Output per unit of land in the high-density schemes exceeded that in the low-density schemes. The rate of return on capital invested followed a similar pattern. Although the evaluation report

mentioned that output per unit of land grew more quickly in the high-density scheme, the level of output was substantially greater in the low-density scheme.¹⁵ The high-density schemes with intensive farming styles appeared to be very productive in terms of output per unit of land and the number of people supported by that land.

Probably drawing on these experiences, state planners stipulated, in the third *Development Plan 1974-1978*, the need to redefine the size and criteria for land ownership in settlement schemes and for cooperatives in order to leave room for more small farms. The state, however, did not commit itself to the purchase of large farms for further settlement of smallholders. Neither did it conceive of the idea of a land tax or a legal ceiling on the size of holdings. The subdivision of the large farm sector to the small farm sector came virtually to a standstill in the early 1970s¹⁶ and proceeded after that at a slow pace.

The situation evolved in this way despite that various state sponsored socio-economic studies conducted during 1971-1972, indicating that 'non-progressive' smallholder agriculture could be highly productive, even under unfavourable conditions. These farmers were more productive than the large(r) farmers. The research results invariably showed that the smaller the size of the farm, the higher the output per unit of land, the higher the level of wage employment in relation to the area cultivated and the smaller the costs of inputs used per hectare.¹⁷

This particular aspect of smallholder agriculture strengthened the belief of large numbers of state planners and policymakers in that sector. Policy documents such as the *Sessional Paper on Employment of 1973* and the *Development Plan 1974-1978* reflected their views on the positive contribution of smallholder agriculture to the national economy as a provider of employment opportunities and foreign exchange.¹⁸

4.2. Shifting land-use patterns

The fast growth rates of agricultural commodity production are primarily realized in the production of 'new' cash crops such as coffee, tea, pyrethrum, sugar, cotton and food crops such as (hybrid) maize and wheat. Data on land use indicates this clearly. Heyer (1975) compared land-use data for 1930 with the data for 1969-70. Her analysis highlights the fact that in all provinces the cultivated area of millet and sorghum has declining since the thirties, with a parallel increase in the area under coffee, tea and pyrethrum. Sorghum and millet are increasingly being replaced by hybrid maize, especially in Nyanza and Western Provinces.¹⁹ The recorded decline in the cultivated area of pulses, root crops and bananas is, however, less dramatic. When the restrictions on the production of high-value crops and the ownership of graded cattle were lifted by the state, the smallholder population responded immediately by growing and selling these crops.

More recent data on land use from the Integrated Rural Surveys (I, II, III, and IV) held between 1974 and 1979 and the Agricultural Production Survey 1986/87²⁰ for the smallholder sector support the conclusion that smallholder land use shifted increasingly from production of use-value to exchange-value. The degree of commercialization in smallholder agriculture is fairly high. Aggregate data from the IRS surveys reveal that roughly 45 % of total output is marketed, although this differs significantly by region as well as by income and holding size group (see also Table 4.6).²¹

One immediate effect of the strategy of large numbers of smallholders was that commodity production increasingly became *specialized* production, notably of commodities destined for the international market (primarily coffee, tea, horticultural produce and pyrethrum). This trend can be noted from the 1930s onwards when agricultural production became increasingly commercialised. The lifting of the racial barriers on the production of high-value crops accelerated the shift of smallholder production to export crops. This trend is particularly observable in the major export commodity producing agricultural zones in Kenya: Murang'a, Nyeri and Kirinyanga districts in Central Province; Machakos, Embu and Meru districts in Eastern Province and Kisii district in Nyanza Province. In these three provinces, the percentage of smallholders producing export crops (coffee, tea and pyrethrum) was in 1974/1975 70.6 %, 67.9 % and 46.2 % respectively.²² The consequence of this pattern is that the extent to which these households depend on income from export production is high. In Central Province alone in the year 1982, 33.2. % of the *average smallholder household income from commercialized production* came from raising cash crops.²³

Due to different sample sizes and locations of the sample areas, the IRS-I data are not comparable with the later IRS-surveys. A comparison of IRS-II and IRS-IV data indicated that the number of coffee-growing holdings dropped by 7 % while the coffee area remained steady. The number of tea growers and tea quantity of cultivated increased considerably, however, by 22 % and 32 % respectively (see also Figures 4.1 and 4.2). The Pyrethrum area and the number of growers reported a 45 % drop, and production declined by 50 %.²⁴ To make long term interpretations of the shifts in land use even more difficult, the Agricultural Production Survey 1986/87 is again based on a different sample size and location of sample area.

In contrast to smallholder land use, large farm sector data are published annually, probably because these are easier to record. Land use in the large farm sector is shown below.

Table 4.2. Area planted by crop in selected years on large farms ('000 ha.)

	1960	1970	1975	1980	1985	1987*
<i>Cereals</i>						
Maize	57.0	59.3	68.1	70.7	69.0	68.8
Wheat	99.2	121.1	89.8	79.4	66.2	94.6
<i>Temporary indust. crops</i>						
Sugar cane	16.9	26.4	31.5	37.4	27.3	18.3
Pyrethrum	15.9	3.3	4.1	3.6	4.7	4.2
<i>Permanent crops</i>						
Coffee	28.4	29.7	28.3	29.4	40.0	43.7
Tea	14.8	23.8	26.0	27.3	27.4	18.3
sisal	97.9	85.1	73.8	82.5	54.0	54.1

* provisional figure

Source: Statistical Abstract, 1965-1988

The large farm sector land use is subdivided by CBS in:
 - Mixed-farms or estates. These farms generally combine cattle/maize, cattle/wheat or cattle/wheat/maize. The core areas of estate production are Trans Nzoia, Uasin Gishu and Nakuru districts, which are the estate areas of

the former White Highlands. Together the estates make up 40 - 45 % of total large farm area. The estates produce primarily food for the national market.²⁵

- Ranches with extensive livestock rearing, mostly located in the semi-arid zones and producing mainly for the national market.
- Plantations growing coffee, tea, sisal and sugar. These enterprises occupy about 10 % of the large farm area.

4.3. Smallholder and large farm production

Table 4.3 provides a clue as to what kinds of producers realized the phenomenal expansion of commodity production after the 1950s. Total agricultural output in smallholder agriculture doubled between 1964 and 1983.²⁶ Smallholders' share in marketed production increased gradually but constantly from 13.5 % in 1955 to 55.6 % in 1975. After 1985, the contribution from small farms fell below 50 % for the first time in years. A major contributory factor to this scenario was the large increase in the sale of coffee from large farms and a relatively small increase in production of coffee by smallholders and an absolute decline in rice paddy by small farmers.²⁷

Table 4.3. The share of large and small farms in recorded marketed production to Marketing Boards, 1955-1988 (measured in terms of output value)

Year	Large farms annual % change	Small farms annual % change	Total annual % change	% share small farms
1955	-	-	-	13.5
1960	+11.2	+13.1	+11.6	20.1
1965	-7.0	-3.3	-5.2	47.5
1970	+8.7	+21.4	+13.8	52.5
1975	-2.2	+20.1	+9.2	55.6
1980	+13.9	+11.7	+12.7	52.2
1985	-10.3	+1.7	-4.2	54.2
1986	+48.7	+3.3	+24.1	45.1
1987	-16.2	-8.8	-12.9	47.2
1988*	+15.8	+15.8	+15.5	47.1

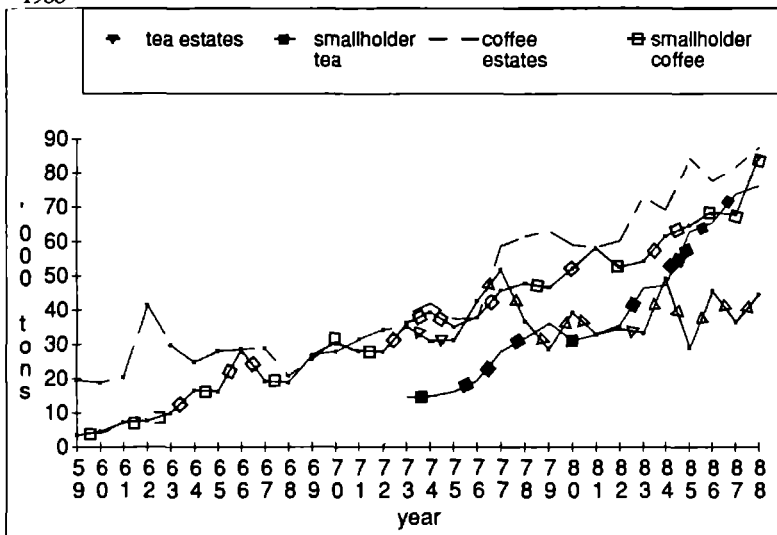
* provisional

Source: Economic Survey, 1970 - 1989

Figure 4.1 shows the effect of this process of 'smallholderization' in detail for two crucial commodities, coffee and tea. It displays the growth trends in coffee and tea production on estates and by smallholder producers. The absolute increase in production may be explained by a combination of changes in productivity of land and labour and by a steady increase in smallholder cultivated area. The variation in production may be explained by variable weather conditions, the changing terms of exchange for coffee and tea and the variation in coffee- and tea cultivated area by estate producers.

The phenomenal expansion in tea and coffee production by smallholders is, apart from smallholder farming strategies, also founded upon the desire of the post-war colonial state, and thereafter post-colonial state, to incorporate small-

Figure 4.1. Export commodity production on estates and by smallholders, 1959 - 1988

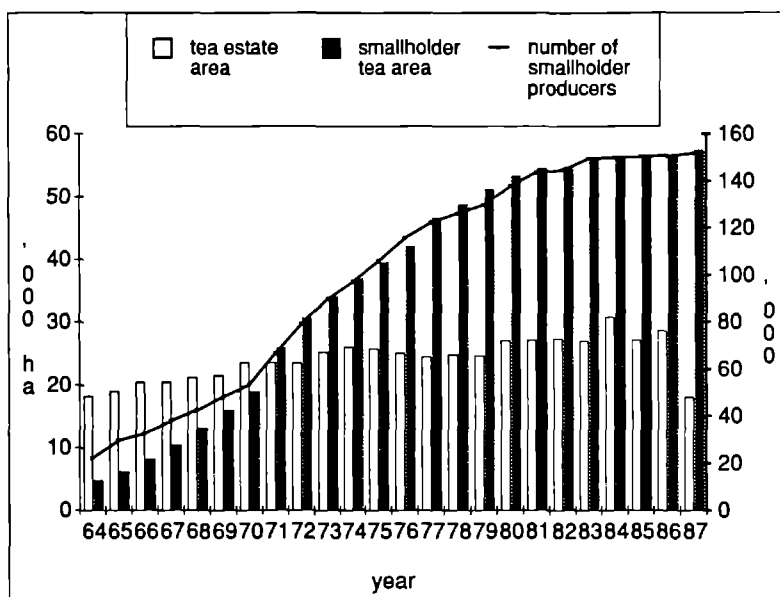


Source: Economic Survey (1960-1989), Statistical Abstract (1956-1988)

scale producers in the process of development. Several producer and marketing cooperatives in coffee and the parastatal company Kenya Tea Development Authority (KTDA) have put considerable efforts in marketing smallholder output, conducting crop research, rendering extension services, supplying inputs and supervising smallholders' labour processes. Figure 4.2, showing the increase in smallholder tea area and the number of smallholder tea producers, indicates that the average area cultivated by smallholders is gradually decreasing in the period 1964 - 1971. The early entrants into tea production schemes cultivated larger average tea plots than those who entered later. After 1971, the trend remains stable. In 1988, producers in state-managed tea production schemes cultivated an average of 0.38 ha. of tea. Figure 4.2 demonstrates clearly the successful implementation of the objective of state policy to integrate more and more smallholders into export commodity production schemes. It also shows that increasingly even the smallest among them were integrated into these schemes.

The consequence of the smallholder land-use allocation system, as noted by Cowen (1983), is that the proportion of direct home consumption out of total food consumption of the export-commodity producing households started to fall rapidly. These households maintained their food consumption level by purchasing food on the market. In addition, many holdings in the small farm sector appeared to small to protect the household means of subsistence (see section 4.5.2.2). An internal market for food and other basic consumption items (maize, meat, milk, bread, clothes, kerosene, etc.) has developed in the course

Figure 4.2. Tea cultivated area by type of producer and number of smallholder producers



Source: Economic Survey (1966-1989)

of the smallholderization and the export-commodity promotion strategy of the state. The demand for food is thus not only based on the purchasing power of the proletarianized masses gathered in Kenya's larger cities (Nairobi, Mombasa, Kisumu, Nakuru) but increasingly also on the consumption needs of the smallholder households in the rural areas. Rural households are both consumers and producers of maize. The production retained for home consumption covers only 60-65 % of total family consumption. Schmidt (1979) estimates that rural market demand accounted in the 1970s for 80 % of total demand, i.e., approx. 3.5 times the demand in urban areas.²⁸

In this context it is crucial point out that the largest proportion of production of food for the internal market originates from estates in the former white Highlands. Ownership of these estates lies with members of Kenya's ruling classes and politicians. Estate production accounts for the largest proportion of maize sales and virtually all production of wheat. For the year 1978/1979 and for 1983 it was estimated that their share of marketed maize production was about 70 %. In 1976, 90 % of maize produced on estates originated from three large-farm districts, Trans Nzoia, Uasin Gishu and Nakuru.²⁹ The smallholders' share of marketed maize output in 1978/1979 and 1983 was 30 % (even though the smallholder production accounted for 80 to 90 % of total maize output).³⁰

Table 4.3 already demonstrated the growing importance of smallholder production, i.e., the produce of more than 80 % of Kenya's rural population. More importantly, perhaps, the smallholding community became a major foreign exchange earner and thus a major source of state revenue in the form of taxes. The favourable international terms of trade during the 1960s and up to the mid 1970s nourished both the expansion of export commodity production and the confidence of the producers in the post-independence state and state policy.

As a result of post-independence agricultural policy, the plantation and estate sector maintained its economic position. These sectors accounted throughout the 1980s for all sisal and virtually all pineapple production; a little less than 40 % of the coffee, slightly more than 50 % of the tea and about 40 % of the sugar cane; 30 % of the pyrethrum; 20 % of the marketed milk and 70 % of the marketed maize.

Household commodity production on numerous smallholdings accounted for 60-65 % of the total coffee production; 70 % of all pyrethrum; all cotton; about 60 % of sugar cane; approx. 40 % of tea; all the tobacco; 80 % of the marketed milk and 30 % of the marketed maize. Because of the emphasis of the state on the promotion of household commodity production (to paraphrase the slogan 'expanding the smallholder sector') in dairy farming, horticultural crops and tea in particular, considerable changes will result in the proportion of household producers in marketed production of such produce.³¹

Due to state policy, the estate producers have been able up to now to continue accumulation in large-scale agriculture largely based on capitalizing on smallholders' consumption of purchased food.³² It is clear in this context that indigenous accumulation in estate agriculture and household export-commodity production converge closely in two circuits of exchange: an international and a national circuit.

The level of food consumption of the households engaged in specialized commodity production - and thus the willingness of these households to produce for the market - depends to a large extent on the prices paid to producers by the principal marketing boards for their commodities. Producer prices are either fixed by the state or determined by price fluctuations on the international market. This implies, as Cowen (1986) notes, that household commodity production could be increased 'provided that the (international and national, p.h.) terms of exchange permitted smallholders to maintain food consumption and satisfy their rising demand for other basic goods and services which are provided through the market.'³³

A direct implication is that the international terms of exchange for Kenya's principal export commodities influence directly the level of accumulation on the estates unless the state carries the load of accumulation through a privileged system of marketing and price regulations. Moreover, if the conditions for estate food production should deteriorate, for any reason, marketed output from the estate areas would be reduced. This, in its turn, would force smallholders to grow their own food and reduce their proportion of marketed output. Small farmers also cut back on export commodity production or cease to produce these commodities if the *international* terms of exchange, which are beyond control of the state, are unfavourable, small farmers would then start to grow food for subsistence.³⁴

This feature of Kenya's agrarian structure, particularly the intersection of two circuits of exchange and the effectiveness of the exercise of state power within the realm of the national circuit of exchange, will be discussed in more detail in Chapter 7, section 2

State agricultural policy also generated another specific pattern of agricultural production contract farming production schemes. In addition to the existing production schemes established during the colonial period by foreign agribusiness firms, the post-colonial state developed plans to expand these schemes, in particular for local production of crops which at the time of independence were imported in considerable quantities (sugar, barley, tobacco, cotton, oilseeds, vegetable oils, see Chapter 3, section 3.2). This form of production, in which producers are closely tied to supervision of production and the terms of exchange regulated by the contracting enterprises and parastatals, emerged rapidly in Kenya. Contract farming arrangements between international agribusiness firms and/or parastatal companies and boards with household producers account now for 40 % of tea (in KTDA-managed production schemes), about 50 % of sugar cane, all barley produced (in Kenya Breweries managed schemes) and 80 % of tobacco production (BAT-K) ³⁵ Oilseeds and vegetable oils are produced by smallholders in production schemes managed by East African Industries (EAI) and by the newly formed Oil Crop Development Authority ³⁶

The state as well as the household commodity producers found contract farming beneficial and accepted this mode of organization in agriculture. Socio-economic research indicated that the peasant households engaged in contract-farming commodity production schemes in tea, and to a certain extent also in sugar and tobacco, obtained positive income benefits from these arrangements ³⁷ These findings correspond with Cowen's in Central Province. Cowen (1974, 1981) has shown that the intervention of agro-industrial enterprises, facilitated by the state, resulted in a more equal distribution of agricultural incomes ³⁸

As a result of these import-substituting crop developments, the country became self-sufficient in sugar and barley (since 1979) and tobacco (since 1982). Oilseed and vegetable oil schemes are still not successful and imports continue, although in decreasing quantities. It is particularly relevant for the state that these commodity production schemes reduced the need for imports and save foreign exchange. Whether these schemes produce the intended employment-enhancing effect or stimulate linkages between agriculture and industry is ambiguous ³⁹

4.4. Agricultural inputs and labour use in agriculture

A key feature of Kenyan agricultural policy, which had contributed to the fast growth rates in the agricultural sector, is the growth in use of modern agricultural inputs, such as fertilizers, agro-chemicals, purchased improved seeds, ploughs, tractors and improved hoes. The core of the proclaimed agrarian revolution programme was the transformation of the labour process in agriculture in order to raise productivity on the farm and to increase marketable production. It was especially directed towards improving the objects and instruments of labour. Production became not only increasingly commercialized, but also increasingly capitalized. The Kenyan peasantry is frequently glorified for its fast adoption of innovations by several

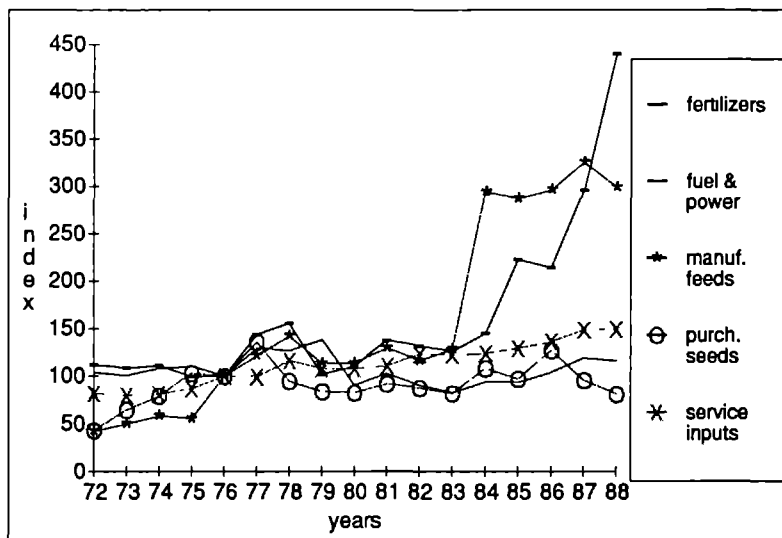
development agencies such as the World Bank, as well as responsible state institutions (extension service, agricultural research institutions) which facilitated the adoption process.⁴⁰

In Chapters 6 and 7 we will go into more details of a particular case of technology transfer to the agricultural sector: the introduction of hybrid maize and associated commodity packages of land- and labour-saving technologies.

Figure 4.3 shows the trends in use of key agricultural inputs from 1972 to 1988 (1976=100). The period under review shows remarkable declines and increases. Contributory to these fluctuations are the influences of 'good' and 'bad' years and the fact that the terms of exchange are fluctuating as well. The use of purchased seeds (i.e. mainly hybrid maize, wheat, sunflower, barley, seed potatoes) lags behind the application of fertilizers almost every year. The marked difference can be explained by the fact that the biggest proportion of total fertilizers applied is for crops such as coffee, tea (export) and sugar (internal market). For 1982/83 it was estimated that 60 % of total fertilizers was used for these three crops, while for maize and wheattwo major commoditized food crops in Kenya, only about 26 % of total fertilizer was used.⁴¹ The two crops which receive the bulk of fertilizer do not feature in Figure 4.3 under the category purchased seeds. This may explain the marked difference.

The data on the employment of wage-labour in agriculture and modern, mostly imported, farming implements (such as tractors, planting machines, harvesters) also not incorporated in Figure 4.3.

Figure 4.3. Agricultural input indices, 1972-1988



Source: Economic Survey (1976, 1980, 1984, 1989)

The employment of modern farm implements (tractors, harvesters, planting machines) in Kenya is high compared with other African countries.⁴² The data produced by the Integrated Rural Surveys on this item for smallholder farms, the intermediate 'gap' farms and large farms are hard to interpret because they only show the distribution between the provinces and not the distribution between the three categories. It is, however, accurate to state that the use of harvesters and planting machines is fairly restricted to the large farm areas (notably Rift Valley Province), while mechanization of land preparation is a common phenomenon in smallholder agriculture. It is assumed by a World Bank study that more than half of the tractor-hours spent in agriculture is employed on medium and small scale farms.⁴³ The demand for tractor hire services is high.⁴⁴ A small share of the tractors is owned individually by medium- and large-scale farmers; the largest share of tractor-hours is provided by the government (Tractor Hire Services, operating 1,000 tractors) and private agricultural contractors (the actual number is unknown).

An ILO-mission report of 1972 confirmed the high rates of employment of casual or seasonal and regular agricultural wage labour. The report stressed that rich and middle peasant households were hirers of wage-labour: the rich tends to hire permanently and seasonally while the middle peasant household tend to hire casual and seasonal wage labour.⁴⁵ Agricultural wage labour has a very long history in Kenya and appears not to be merely restricted to the large farm sector.⁴⁶ The IRS-I survey⁴⁷ and various research projects at district level show unquestionably that, within the smallholder sector, the rate of wage labour employed on smallholdings is large and probably increasing. About 10% of labour used on holdings is hired. Collier and Lal (1986) estimate that approx. 60 % (within a range of 50 to 75 %) of hired labourers appears to be landless.⁴⁸ The IRS-I survey indicated that the hiring of wage labour differs considerably by holding size as well as by region. Significantly, perhaps, there is a clear inverse relationship between farm size and labour hiring per hectare. From Kitching's (1977) interpretation of the data produced by Population Census of 1969, it may be concluded that approx. 60% of the agricultural wage labour force is employed on smallholder farms. The fourth *Development Plan* 1979-1983 estimated that 76% of total agricultural wage labour time is spent within the smallholder sector. The rest is employed on large scale mixed farms, ranches, irrigation schemes and plantations.⁴⁹ Collier (1983) found that in the most commercialized area in Kenya, Central Province, 11.3 % of the days worked on smallholdings (and 10 % of the hours) was accounted for by hired labour.⁵⁰ Cowen (1986) stressed that the success of smallholder production has created a shortage of wage labour across a range of large and intermediate-scale farms.⁵¹

4.5. Differentiation in Kenya

So far we have only marginally considered the inter-regional and intra-regional differences. The conditions for individual peasant households and regions to participate in commodity production differed, however, and from the start of commercialization of production in the 1930s glaring differentials between regions and people began to emerge. Cowen, Heyer and Kitching reiterate, that from the start of commercial production in the early days of colonialism to the onset of the 'agrarian revolution' in the fifties, farming strategies of individual peasant households were increasingly oriented

towards earning money. Modern money was made king, at least as a means of exchange of commodities. The farming strategies relied not only on earning money through agricultural production but, from the early thirties onwards, increasingly also on income from wage labour migration and other sources of off-farm income. Both, Cowen and Kitching have emphasized the importance of marked inequalities in land holding and the differences in access to means of production (land) and to sources of off-farm income (i.e., 'straddling').

Kitching (1980) depicts the following picture based on the observed correlation between holding size, farm income and off-farm income of the individual household:⁵²

'The migration of male households heads to unskilled wage labour was the response of those households who had least land and who thus felt the constraints of low yields most acutely. The return even to low-paid wage labour time was superior to cultivating labour time for such households because these constraints were so severe. Moreover, and just as importantly, once this decision had been made, reliance on wage labour income by the household became more and more complete, because labour input into already small land holdings itself declined and with it the farm income. (...) At the other end of the spectrum, the migration of a male household head from a larger landholding to a much more highly-paid skilled or white collar post provided the means to purchase both more land and the labour power with which to work it.'⁵³

For the poorest households as a general rule, the diversion of labour away from the farm could make a greater contribution towards subsistence. For the richest households, comparatively large farm incomes were supplemented with even larger off-farm incomes. In between these extremes we find:

'many middle-level households where the male remained on the plot and increased his labour input, as did his wife, but even among labour migrants wage incomes were enormously varied both at one time and through time, since the African labour force in colonial Kenya was stratified by a myriad of finely-graded wage scales.'⁵⁴

After reviewing several household surveys carried out by the government as well as by independent researchers (Cowen, Hunt, Heyer), Kitching identifies three broad groups of households and agricultural zones left out in the cold by the 'agrarian revolution'. It is not surprising that his categorization is based on holding size and off-farm income (often wage labour migration). The influence of the ecological variation in altitude, rainfall and quality of the land makes it extremely difficult to specify the holding size threshold below which the enterprise became unviable.

'(...) those left out were those with the ecological opportunity (of growing the new crops coffee, tea and pyrethrum, p.h.) but without the land, capital or labour power to take advantage of that opportunity (Central Province, Kisii, Machakos highland and parts of Central Nyanza), those without the ecological opportunities and without enough land to make up for yield deficiencies by the size of the cultivated area (lowland Machakos, Kitui, other parts of the Coast, Nyanza lowlands), and those with the land and the opportunity, but essentially without the capital (Nandi, Kericho, West- Pokot). Common

to all of them was the marked narrowing of alternatives due to lack of access to sufficiently large sources of off-farm incomes. With such sources land could be bought, labour hired and capital invested in the 'home' area, or if the latter was poor or semi arid, better land could be bought elsewhere.⁵⁵

His conclusion is that the 'agrarian revolution' 'had by 1970 touched only a minority of the smallholding households of Kenya in any way', and that it 'did little or nothing to alter the patterns of differentiation which had been operating among Africans in Kenya before its onset'. On top of the existing pattern of differentiation,

'after 1952 there was a speeding-up of the process of differentiation (socially as well as regionally, p.h.), particularly after Independence, when some African households gained access to the resources of the state. With this speeding-up, there was also a widening of the relative gap between the richest and poorest African households (and between regions, p.h.), as some gained access to the very highest incomes and to forms of wealth which had previously been monopolized by Europeans and Asians. Despite this speeding-up and intensification of the process of differentiation, the mechanisms of income and wealth accumulation remained largely unchanged, and in particular the essential mechanism of using access to off-farm business remained the touchstone of accumulation and differentiation.'⁵⁶

Later on, after the following section, we shall see that Kitching's conclusion requires important adjustments.

4.5.1. Regional differences in commoditization

An analysis of regional differentiation is closely connected with the spatial developments laid down as a consequence of colonial state policy. From the early period of colonialism to the present period, spatial development in Kenya has been unequal. Infrastructural development during the colonial period took place primarily in favour of the White Highlands, the core of settler and estate agriculture containing most of Kenya's fertile agricultural land. The construction of the Uganda Railway, from Mombasa to Kisumu, and the later extension of the railway to Kitale in the 1920s, favoured agricultural development in the regions adjacent to the railway line. Additionally, infrastructural development planning, such as road construction, agricultural research and the provisioning of agricultural credit and services, was increasingly geared towards the White Highlands.

The Non-Scheduled Areas lagged seriously behind in infrastructural development, particularly during the pre-war period. When commodity production started to expand in the Reserves, the colonial administration started to pay more attention to the infrastructural development of these areas. Plans were drawn up and implemented to upgrade the existing infrastructure to support agricultural development. The colonial administration clearly favoured Central Province and some districts in Rift Valley Province (i.e. Kikuyu land and the former White Highlands) at the expense of others (i.e. the Reserves excluding certain parts of Central Province). In other areas such as Western Kenya, agricultural development remained at a much lower level; the predominant economic activity was labour migration to the White Highlands

and/or subsistence agriculture. The traditional white settler areas, mainly in Rift Valley Province, remained throughout the colonial period a net receiver of public investment funds for infrastructural development. The political dominance of the white settler over the state ensured the continuing assistance of the administration for the development of a viable settler economy.

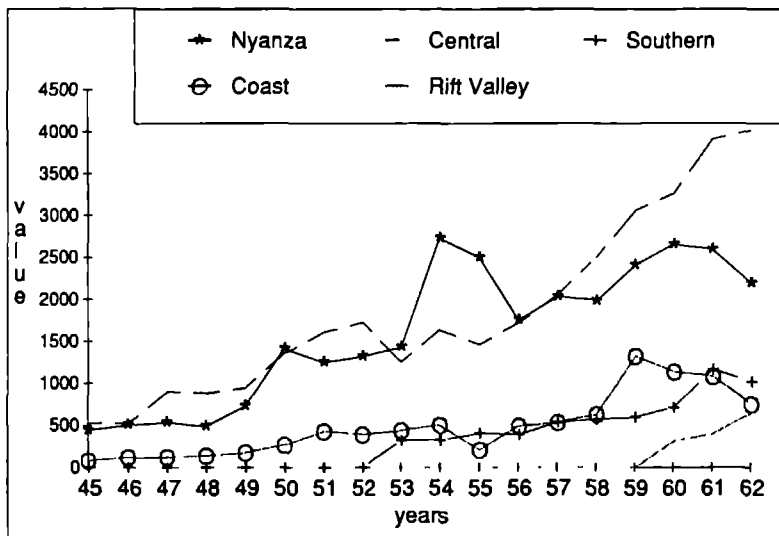
The weakening of the political and economic position of the settler economy after World War II coincided with a simultaneous build-up of economic and political power in the Reserves, notably in Central Province. This situation forced the colonial administration to reverse its policies. During the 1950s, the new policy of the colonial administration was focused primarily on Central Province. Programmes aiming at land consolidation and title-deed registration were first implemented in Central Province. The same can be said about the stationing of agricultural extension officers. This focus on Central Province was influenced by the existing natural and infrastructural advantages of the province. But it was not only an easy option for the state to explore its economic potential as political considerations too underlie the emphasis of policy implementation on Central Province. Central Province was, on the one hand, the region where indigenous accumulation of capital in agriculture was already well advanced (see Chapter 2, section 4.). On the other hand, Central Province had been the particular focal point of the Mau Mau rebellion and the struggle for independence from colonial rule since the early fifties.⁵⁷ It received therefore, particularly during the Emergency years, substantial development and infrastructural resources with a view to restoring order and peace and preventing revolutionary changes in the country. And thus the region was advantaged and has maintained since that time its position of economic dominance.

The economic position of Central Province has not always been the strongest compared with other regions. Until 1957, for instance, Nyanza and Central Province produced roughly the same quantity of marketed output. Kitching stresses the structural differences between districts in Central Province (Kiambu, Fort Hall and Nyeri) and those in Nyanza Province (North Kavirondo, Kericho). In the former, the effect of market forces was strong enough to produce rapid expansion of output and sales. Being within striking distance of Nairobi, these districts were the first to experience the increased demand for all types of foodstuffs. Their response to the offered opportunities was immediate. In the Nyanza districts, the problem was slightly different. These districts depended almost entirely on the export of maize cultivated by hoe or ox-plough. As a low-value and high-weight crop, maize suffered from high transport costs, increased by the bad state of many roads. The transport factor impeded the spread of production in areas remote from infrastructure and markets.⁵⁸

To Kitching's explanation of Central Province's fast growth rates can be added that offered by Heyer. Development in Central Province was long frustrated by the colonial authorities. After the lifting of the restrictions, the potential was rapidly explored by numerous households. This argument can easily be extended to Rift Valley Province growth rates. Nyanza (except Kisii district) and Western Province (except Bungoma district) did not have such large areas that were well suited to the expansion of cash crops hitherto prohibited. The limited resources were already in use. Nyanza's growth did

not stagnate, but its marketed output grew less dramatically at the moment that Central Province experienced fast and sustainable growth rates.⁵⁹

Figure 4.4. Smallholder marketed production by Province, 1945 - 1962



Source: Heyer (1975), p. 159

Agricultural development in Western Province and Nyanza was primarily dominated by maize. After 1957, growth in Central Province became progressively based on arabica coffee and to a lesser extent on maize, hides and skins, pulses and fruit and vegetables. Tea, dairy products and pyrethrum only became important in the sixties. After 1957, Nyanza's production became more diversified. Cotton, hides and skins, groundnuts for a while and coffee became important crops in Nyanza. Coffee, however, never became as important in Nyanza as in Central Province. The fluctuations in output after 1957 can no longer be attributed to maize only.

The effect of the introduction of high-value crops on the one hand and the concentrated efforts of state policy towards Central Province on the other hand, has been shown by Heyer (1974, 1975). By using the value of marketed production by smallholders as an index for development in smallholder agriculture (see Figure 4.4), Heyer demonstrated that from 1957 Central Province rapidly drew ahead of other provinces.⁶⁰ One remark is necessary. Before 1953, Central and Southern Province was counted as one administrative entity. In 1953 they were split into Central Province and Southern Province. The comparison of Nyanza and Central Province is influenced to the extent that after the split Nyanza had considerably more population. This makes the comparison even more disturbing.

Data compiled by Bigsten for the year 1971 on gross marketed production by province in cereals, industrial crops, permanent crops and livestock and related products show a slightly different picture. The difference from Heyer's data is that Bigsten's data comprise marketed output from small as well as large farms. About 41 % of gross marketed output came from Rift Valley Province. Central Province produced around 27 % of total gross marketed output, while Nyanza, Western and Eastern produced approx 9 %, 3.5 % and 10 % respectively.⁶¹ The trend towards unequal regional distribution of marketed agricultural production is clear. Two provinces, Rift Valley (excluding districts like Kapado, West-Pokot, Samburu and Turkana) and Central Province produce the bulk of Kenya's agricultural output.

Rift Valley Province's leading position and fast growth rates can be explained by the fact that it is dominated by large scale farms (mainly in maize and wheat) which were left intact after independence and some successful state-managed agricultural commodity production schemes for smallholders which have been introduced in the region.

Detailed regional comparative studies by Tait Davis (1977) and Dietz & Koninx (1984) revealed that during the period 1960/1961 and 1976 - 1979 agricultural growth in the smallholder districts did not accelerated at the same pace.⁶² More importantly, the exhibited growth proved to be quite unstable. The instability of growth is reflected in an increase or decrease in the degree of commercialization of commodity production and in wage labour migration.⁶³ Growth in Nandi district, for example, exhibited an upward trend in commercialization of agricultural (maize, tea) and livestock (meat, milk) production and a related downward trend in wage-labour outward migration. A similar trend is manifest in Kisumu district, although growth is mainly based on tea and coffee production for export purposes. Kilifi and Kisumu districts, on the other hand, exhibited a clear decrease in the extent of commercialization in agriculture and an increase in wage-labour outward migration. A second unambiguous trend is that the differences between regions levelled out somewhat after the 1970s as more regions and producers were incorporated in state and/or agribusiness managed production schemes. Dietz & Koninx (1984) speak in this respect of regional polarization and of regional equalization.⁶⁴ Polarization in the sense means that agricultural developments in the arid and semi-arid areas stagnated relatively compared with sustainable and high growth rates in Central Province and the agricultural core districts in Rift Valley Province (Trans Nzoia, Uasin Gishu, Nandi, Nakuru). Since the 1970s, the commercialization of livestock in the arid areas increased considerably in the northern regions. This contributed to equalization.

Regional polarization is taking place if we consider the agricultural output growth rates of Kenya's major and traditional agricultural zones. Kisumu district, Central Province, Embu/Meru and Machakos districts (in Eastern Province) and Rift Valley Province displayed higher and more sustainable growth rates in comparison with the exhibited lower - even negative - and relatively unstable growth rates in Western (except Bungoma district), Nyanza (except Kisumu district) and Coast Provinces. Dietz & Koninx estimated that Nyanza, Western and Coast Provinces experienced negative growth rates between 1971 and 1977 of -16 %, -4 % and -2 % respectively. These figures include the positive growth rates of Kisumu (in Nyanza Province) and Bungoma districts (in

Western Province). In the first named regions, i.e. Central, Eastern and Rift Valley Provinces, agricultural growth rates were estimated at +7 %, +9 % and +6 %, respectively.⁶⁵ Among these three provinces and Kisii district we can speak of prolonged regional equalization.

The research of Bevan et al. (1989) confirms the process of regional polarization. In 1982 they conducted a household survey in Central and Nyanza Province. A comparison with data from IRS-I of 1974/1975, despite that it is fraught with difficulties, shows that agricultural incomes in Central Province declined by 5.7 %. In Nyanza Province, farm income declined in the same period with 21.9 %. Note that in this period the producer prices for export commodities declined significantly with the general effect of lower agricultural incomes.⁶⁶

There has been no recent research on regional inequality on the national level. Nevertheless, the lack of recent data does not preclude an assessment that the pattern of regional disparities based on agricultural commodity production has not changed fundamentally. The trend towards the expansion of agricultural commodity production for the international and national market in certain areas, and towards regionally confined enrichment and accumulation, perseveres. The perseverance of the trend towards, on the one hand, enrichment and, on the other hand, impoverishment is confirmed by several regional level studies.⁶⁷ Commodity production continues to expand and/or maintain high output levels notably in districts where household commodity production for the international and national market is the predominant form of production and the basis for accumulation of wealth and capital - i.e., in Central Province (Nyandarua, Nyeri, Muranga in particular) and some districts in Eastern Province (Machakos, Embu, Meru), in Rift Valley Province (Kericho, Nakuru, Nandi), in Western Province (Bungoma), in Nyanza (Kisii). Western Province (except Bungoma district), Nyanza Province and the whole northern territory, comprising virtually all the semi-arid and arid lands of Kenya, exhibit clear trends towards marginalization and impoverishment. Socio-economic development in these regions is increasingly based on wage-labour migration and less and less founded upon developments in the agricultural sector itself.

Bigsten (1980, 1981, 1984) documents regional differentiation as coinciding with a spatially unequal distribution of institutionalization and physical infrastructure. The distribution and quality of health and education facilities, the spatial distribution of the industrial sector and the spread of infrastructure and employment is rather uneven. Generally, health service are mainly oriented towards the urban areas. Although there has been considerable equalization among regions in primary education since 1974, it is still the wealthiest regions which are best provided with education facilities. There are still large differences in access to secondary education, and there are also considerable differences in the quality of the teaching staff. Bigsten found for the 1970s that, in terms of government expenditure on infrastructure per capita, Central Province received the most and Nyanza Province the least.

Concerning infrastructural development, the tentative conclusion must be that the government puts high priority on the expansion of roads within areas where there is considerable economic activity.⁶⁸ In an effort to combat the processes of regional polarization, there has been a considerable expansion of the input distribution network and the number of marketing boards' depots

outside the traditional agricultural core areas in the new areas, although the infrastructure supporting commoditization of agriculture outside the traditional core areas is still limited. The rural shops, which play a important role in the input distribution network, are still only located in the high potential agricultural production zones in the country. Coverage in medium and low potential areas is thin. Shop holders have been reluctant to move into these areas because of limited scope for cash sales and the difficulty of covering costs on fixed retail margins.⁶⁹ The recent decentralization drive may alter this unequal allocation of state funds between districts.

4.5.2. Socio-economic differentiation

The farming population in Kenya is not, and cannot be treated as, a homogeneous social category. The usual categorization of Kenya's agricultural population is smallholders and large farmers. An ILO mission invited by the Kenya government in 1971 to review the state of the economy, used the following classification system to denote the differentiation of the smallholder community:

Table 4.4. Classification of Kenya's smallholder community by ILO mission, 1972

Peasant households	Number*
Rich	225,000
Middle	250,000
Poor	620,000
Pastoral	220,000
Landless	300,000
Total	1,615,000

* 6 persons per household

Source: ILO (1972), pp. 35-38

The report emphasized that the rich and middle peasant households were among those who benefitted from post-war policy reform and post-independence policies and economic developments. Both groups benefitted from land settlement programmes, land registration and from services rendered by state and marketing cooperatives. The latter three groups of households were designated by the ILO mission as being largely untouched by the agrarian revolution at time of investigation.

Empirical evidence suggests that the smallholder community is highly differentiated in terms of distribution of land and income.

4.5.2.1. Income distribution and poverty in smallholder agriculture

The IRS-I survey, conducted in 1974/1975, gives detailed information on the social and economic developments in smallholder agriculture. Table 4.5 shows the unequal distribution of income and the nature of household income in the smallholder sector. The following observations can be made. The table displays clearly two crucial aspect of the nature of the rural economy.

In the first place, it highlights the importance of straddling agricultural production and off-farm work. Data gathered by Kitching (1980) and research

Table 4.5 Average value of income, expenditures and savings by household income group

	Less than 0 Ksh	0- 999 Ksh		1,000 1,999 Ksh		1,000- 2,999 Ksh		3,000- 3,999 Ksh		4,000- 5,999 Ksh		6,000- 7,999 Ksh		8,000- more Ksh		Total Ksh	%
			%		%												
Farm operating surplus	2,624-	128	23.2	649	43.7	1,327	53.0	1,933	55.9	2,944	61.1	4,239	60.8	7,865	63.9	2,081	57.0
Non-farm operating surplus	832-	87	15.8	170	11.5	250	9.9	409	11.8	572	11.8	421	6.1	1,390	11.3	354	9.7
Regular employment	183	46	8.4	142	9.6	128	5.1	457	13.2	449	9.3	1,290	18.6	2,331	18.9	566	15.5
Casual employment	155	116	21.1	217	14.6	350	14.0	222	6.4	266	5.5	439	6.3	281	2.3	252	6.9
Remittances from relatives	241	159	28.9	261	17.6	389	15.5	390	11.3	443	9.2	404	5.8	322	2.6	324	8.9
Other gifts	38	14	2.5	46	3.1	61	2.5	45	1.3	141	2.9	160	2.3	128	1.1	75	2.1
Total household income	2,840	551	100	1,485	100	2,505	100	3,456	100	4,815	100	6,953	100	12,317	100	3,652	100
Total outlays	3,691	1,611		2,165		2,721		3,364		3,893		5,618		6,505		3,450	
Current savings	6,530	1,060-		681-		216-		93		923		1,335		5,812		202	
Number of holdings	98,982	175,057		332,813		204,972		204,972		200,501		117,919		179,176		1,483,422	

Source: IRS-I, table 8.5

conducted by Cowen in the Central Province, the most commercialized agricultural area, invariably indicated that peasant labour time is increasingly spent as wage labour time outside the farm.⁷⁰

Research outside Central Province reveals that the trend is emerging elsewhere in Kenya as well.⁷¹ Research of Martin (1984) in Maragoli district in Western Kenya disclosed that, as a consequence of the deteriorating terms of exchange for export commodities, producers ceased to produce for the international market. In particular the poor peasant households in Maragoli, producing coffee on holdings smaller than 1.2 ha., moved out of commodity production and went into semi- and unskilled migratory wage labour employment in Kenya's larger cities.⁷² Consequently the proportion of off-farm income in the total income of a household is increasing. Martin noted between 1969 and 1979 an increase from 77.5 % to 84.5 %. Bevan et al. (1989) noted an increase of 7 % for Central Province and of 11.7 % for Nyanza Province between 1974/75 and 1982.⁷³

The bottom 40 - 50% of the smallholder population survives by straddling smallholding production, casual wage labour and petty trade and remittance from relatives. Bevan et al. (1989) indicated that the off-farm income was the most dynamic component of household income. The decline in income from agriculture, caused by a general worsening of terms of exchange for agricultural commodities, has been met by a re-allocation of labour time off the farm.⁷⁴ Collier & Lal (1986) estimated that 18 % (within a probable range of 11.5 % and 23.5 %) of smallholder peasant labour time is spent off the farm.⁷⁵

Straddling in this particular perspective is thus not the means towards capitalist accumulation but the way to protect the means of subsistence. Greer & Thorbecke's (1986) research revealed that the success of poor peasant households in protecting their means of subsistence varies considerably. They showed that nutritional levels are extremely inadequate in the lower income groups because of low food consumption levels. Total purchased food items appear to be high in the income groups below 3,000 Ksh in relation to the low income.⁷⁶ On the basis of IRS-I data Vandemoortele (1982) found that 33 % of all the rural households are affected by poverty; their average incomes equals only 55 % of the poverty line.⁷⁷

In the second place, the data in Table 4.5 on *farm operating surplus* and *current savings* suggest a strong income differentiation among the smallholder community in Kenya. Poor households, with average incomes lower than Ksh 3,000, e.g. 55% of the all rural households, find it increasingly difficult to make ends meet. Their current savings appear negative which means that their survival depends largely on borrowing money.⁷⁸ The income group above Ksh 8,000, e.g. 179,176 households (12 % of the total) save 47 % of the total average income, i.e. Ksh 12,317. Total savings of this income group are about Ksh 1,080 million which represents 27 % of total capital formation in 1974. Furthermore, higher income groups tend to have more and better access to off-farm income compared with poorer households. Carlsen (1980) suggests the rich peasants' and even middle peasants' savings go into banks and out of agricultural sector which on its turn is via the banks channelled towards investment in urban areas.⁷⁹

Crawford and Thorbecke (1978) estimated the distribution of income in rural Kenya for 1976. They, as many others, relied mainly on IRS-I data. Of the 1.42 million smallholder peasant households, 44 % earn average incomes of

less than K£ 100, and 51 % an average of K£ 250 per annum. The former group are very likely to be living in poverty. Even the significant number of smallholders averaging K£ 250 per annum can hardly be described as rich, since their average incomes lie below the average for Kenya as a whole, i.e. K£ 291. Only 5 % of smallholder households receive an average income of K£ 600. The richest group in the agricultural sector are the 3,400 large scale farmers, whose farms exceed 20 ha and whose incomes average K£ 2,500 per year.⁸⁰

Vandemoortele estimated on the basis of *national level* data that the lowest 40% of the population received only 9% of the *national* income in 1976, whereas 60% of the income accrues to the top 20% of the population. He found a Gini-coefficient of 0.59.⁸¹ Within the rural areas it appears, however, that the inequality among smallholders is significantly lower than among the other rural households, including large farmers, 'gap' farmers, landless people and pastoralists. For the last group the intra-group Gini-coefficient was 0.67 in 1976. The inequality within the urban areas is larger than in smallholder agriculture (a Gini-ratio of 0.51 and 0.38 respectively).⁸²

The following table shows the distribution of sales and the degree of commercialization for smallholder agriculture in 1974/1975. The table indicates the concentration of sales: 17.5 % of the holdings, i.e. holdings larger than 4 ha, realized 60 % of total marketed output. Table 4.6 is however aggregated on a high level and is a static picture.

Table 4.6 Share of average value of marketed output (Ksh) by holding size group (ha), 1974/1975

	Under 0.5	0.5 -0.9	1.0 -1.9	2.0 -2.9	3.0 -3.9	4.0 -4.9	5.0 -7.9	8.0 over
Sales	546	798	699	1349	1454	2305	2575	2030
Production consumed on farm*	835	1011	1270	1735	1744	2009	1996	1903
Degree of commercialization (%)	38.4	42.9	33.9	43.7	45.5	53.4	56.3	51.6
Share of sales (%)	4.6	6.8	5.9	11.5	12.8	19.6	21.9	17.8
No. of holdings ('000)	206.3	265.8	400.3	224.0	131.9	107.0	96.3	51.4
Distr. of holdings size group (%)	13.9	17.9	26.9	15.1	8.9	7.2	6.5	3.8

* as household consumption, given to labour and stock or seed retained for production

Source: IRS-I, table 8.26, p. 68

Cowen's (1974) research in two sub-locations in Central Province revealed that between 1964 and 1971 there was a fall, a decrease in the measured inequality of tea and milk production. The explanation for this fall is to be sought in the resilience of the middle peasantry, that large group of households with holdings within the middle range of the size distribution by assets. In Central Province, holdings of the middle peasantry lie within the 1.2 to 2.8 ha group.

by size distribution of holdings. A group of farmers entered into tea and milk production for sale in 1964 and, in 1971, accounted for a relatively larger proportion of output than they did in 1964. Cowen found a substantial improvement of the agricultural income of middle peasants.⁸³ This corresponds with Bager's (1980) findings in Kisii district in Nyanza Province and of Martin's (1984) in Maragoli district in Western Province.⁸⁴ Cowen as well as Martin, however, raise the point that it may also be that the variation in the proportionate growth accounts for the relatively worsening position of the smaller 20 to 30% of all producers.

The latter coincides with Collier & Lal's (1984) findings. They compared the distribution of farm income within smallholder agriculture in Central Province between 1963 and 1974 (based on a comparison of data from an Economic Survey of Central Province 1963/4 with IRS-I data). The comparison indicates that the poorest 40 % lost a substantial share of income to the middle and rich peasant households. They contend, however, that the bottom 40 % were not made poorer as their real capita income increased by 9 %, while the middle and rich increased their income 60 %. More importantly, the poorest 40 % maintained their level of consumption while the richest producers lost part of their share to the middle peasants.⁸⁵

Collier and Lal (1984) suggest, however, that only the rich peasantry is adopting high risk development strategies such as investments in tree crops and graded dairy cattle. The result is hard to assess, but through capitalization they may regain their former share of income. This is also brought forward by Leys (1978) and Peterson (1986).

It is quite obvious that the regional concentration of agricultural commodity production coincides with regional inequalities in wealth. In Chapter 2 it was argued that during the pre-independence period accumulation of capital in Central Province by capitalist and rich African farmers was already well advanced. That capital was mainly accumulated by commercialising production as well as by straddling. When the option for further accumulation in agriculture was offered, the process went rapidly ahead. Some of these past developments are reflected in the contemporary regional distribution of household assets among smallholder families, which are accumulations out of past levels of income. According to data collected by IRS-I, Central Province invariably has a greater than average mean holding of assets, while households in Eastern (except Meru and Embu districts, p.h.), Nyanza and Western Provinces are often below average in their possessions.⁸⁶ These arguments can easily be extended to some districts in Rift Valley Province (such as Nandi, Kericho, Nakuru).

On the basis of IRS-I data, Smith and Dorling calculated the distribution of smallholder income by agro-ecological zone. In general, the distribution of income among smallholder supports the view that the unequal spatial distribution of agricultural commodity production in suitable ecological zones coincides with unequal distribution of income between the zones. The coffee and tea zones west of the Rift (Nyanza and Western Province) and the cotton zone east of the Rift (mainly Eastern Province) exhibit below-average incomes. Large proportions of the population in these zones have incomes of less than Ksh. 500/- per adult equivalent per annum. The western tea zone of the Rift (mainly Rift Valley Province) and the tea and coffee zones to the east of the Rift (mainly Central Province and parts of Eastern Province) show high

incomes. A small proportion of the population in these areas has below-average incomes, while a large proportion earns above-average incomes, although, in an above-average income zone, such as the tea zone east of the Rift, 30 % of the people still have annual incomes lower than Ksh. 500/-.⁸⁷ The spread of poverty is almost inversely related to the spread of accumulation of wealth and capital. Poverty and enrichment/welfare are extremely regionalized in appearance. At provincial level, the incidence of poverty is above average in Coast, Nyanza and Western Provinces. Nyanza alone has 37.5 % of all those with inadequate household consumption and accounts, together with Western Province, for 60 % of the total poor. Similar conclusions can be drawn by agro-ecological zones. The zones west of the Rift account for 65 % of the poor.⁸⁸ Among the rural poor, three specific disadvantaged and vulnerable groups were identified: women (particularly women of those households of which the husband is working in rural and urban centres), the landless and the pastoralists.

4.5.2.2. Distribution of land

The ILO-mission report revealed that land-ownership was becoming more and more concentrated during the late 1960s/early 1970s. The report noted that the largest 4 % of farms occupied 47 % of all farm land, whilst the smallest 70 % of farms occupied only 13.3 % of the total.⁸⁹

The available data on land distribution in the small farm sector invariably show a skewed distribution.

Kitching (1980) presents data on holding sizes which were collected during a census held in 1960/61 for 509,800 holdings in Central and Nyanza Provinces and in Nandi district. These data show the marked inequality in holding size. In the area as a whole, 25 % of all holdings (those of 4 ha. and over) covered 65 % of the land in use, whilst 50.7 % of the holdings (all those under 2 ha.) covered just 15.6 % of the land in use.⁹⁰ The ILO mission recorded that in 1969 7 % of the holdings which were over 10 ha. in the then registered small farm area took up 34.9 of the land, while 52 % of holdings under 2 ha. owned 30 % of the land.⁹¹ Similar evidence is found in data provided by the IRS-I survey.

An analysis of these data provided by Dorling shows that, if we exclude the relatively larger holdings of 8 ha. and over, the smallest-scale farmers, accounting for three-fifths of the smallholder population, occupy only 28% of the land. The largest scale farmers, making up 14% of this class, occupy 37% of the total area. The measured degree of skewness would be vastly greater if the data allowed us to include the larger holdings.⁹² Vandemoortele (1982) found on the basis of IRS-I data, that the Gini-ratio for land distribution was 0.45.⁹³ By including land distribution data from IRS-II, and CBS figures on the so-called 'gap' farms, he calculated a Gini-ratio of 0.80. The unequal distribution of land is even more paramount then. Ten percent of the farmers occupy 73 % of the total land; while the bottom 50% occupy about 5% of the land.⁹⁴

Martin (1984) registered an increase in formal inequality in land distribution in Maragoli district. The Gini-ratio for land distribution shows a fall from 0.44 to 0.52 between 1969 and 1977. He stated, however, that there is little doubt that the increasing inequality is a result not of action by the large farmers, but of intensive land subdivision by the smallest holdings.⁹⁵ This is more or less confirmed by Table 4.7.

The IRS-I, II, III and IV surveys are still the best statistical proof of the statement that land distribution in the smallholding sector is unequal. IRS-I, II and IV, for instance, revealed the following distribution.

Table 4.7. Distribution of holdings by holding size, 1974/75-1978/1979 (%)

Size (ha.)	1974/75	1976/77	1978/79
0*		13.7	21.6
0-2	58.8	64.7	61.6
2-4	24.0	12.3	10.5
4-8+	17.2	9.3	6.8
Total	100.0	100.0	100.5
Total number of holdings ('000)	1483.4	2693.6	

* 'Zero hectares' group 'refers to a holding that is not operating any piece of land, although it may own or graze livestock' or rent land. IRS-I did not define this size group

Source: IRS-I, table 7.1. p. 44 and IRS-II, IV, table 8.3., p. 89.

It is striking that the proportion of households within all holding size groups is diminishing except the zero hectares group. Subdivision of landholdings is probably the driving force behind this. We must be careful, however, with these data. There are severe problems attached to the interpretation of these relative figures. The sample sizes as well as the locations of the sample areas are quite different. IRS-IV for Eastern, Central and Rift Valley Province was, for instance, larger than the IRS-II sample.

Besides the numbers of farmers whose holdings are too small to yield more than low incomes from agricultural production, there is also a substantial incidence of landlessness. Table 4.7 indicated that the number of households within the 'zero hectare' group increased considerably in Central and Rift Valley Provinces. The percentage of households in the 'zero hectare' group for Kenya as a whole increased dramatically, from 13.7% in 1976 to 21.6% in 1979. The official estimate is that there are 410,000 landless families and squatters - people who mostly live and work illegally on land they do not own - in Kenya. The nutritional status of the landless is considered as precarious. It was suggested by Mbithi & Barnes (1975) that landlessness was growing during the 1970s at a rate of about 5 % annually.⁹⁶

One of the few options of landless people, other than wage labour outward migration to cities, is agricultural work. Leitner (1976) described agricultural workers as the most numerous and most degraded workers. She found wages ranging from Ksh 86 - 117 monthly for men, even lower for women, i.e., Ksh 52 - 100 monthly, and even lower wages for non-contract work. As the modern urban sector's absorbing capacity is low, the rural and urban 'informal sector' provides the other option. House for instance, found that 43% of the heads of informal sector businesses in Nairobi were landless peasants. Many of them live below the poverty line.⁹⁷

These aggregate figures become particularly relevant when they are disaggregated to mirror district level. The distribution of land ownership in Africanized large farm areas is, as shown by Collier (1978), still highly

concentrated: co-operative settlement did not contribute to the goal of equalization. In Nakuru district for example, 16,500 farmers held plots of slightly more than 1 ha. on average, while just 38 farmers held farms in excess of 4000 ha. In Central Province between 1963 and 1974, the share of the two-fifths of the farmers with the smallest plots went down from 26 % to 18 % of the total land area, with a corresponding gain by those with the largest plots.⁹⁸

Njonjo (1981) carried out a survey in 1974 which covered 230 farms occupying 88,696 ha. or about 67 % of the total African-owned mixed-farm land. He arrived at the following distribution of land by forms of ownership and number of individuals as shown in Table 4.8 below:

Table 4.8. Ownership of surveyed mixed farm land in Nakuru, 1974

Form of ownership	No. of farms	No. of individuals	Hectareage
Proprietors	130	128	23,910.8
Partnerships	47	208	10,781.6
Private Companies	36	347	30,714.4
Public Companies/ Cooperatives	17	17,413	23,290.4
Total	230	18,096	88,697.2

Source: Njonjo (1981), p. 38.

Njonjo furthermore calculated the hectare/persons ratio. In proportions it means that 91 % of the owners held only 21 % of the land and each had less than 1.2 ha.; whereas 5 % of the owners controlled 79 % of the land and owned more than 8 ha. of land. Noticeably, 2 % of the owners, with holdings over 40 ha., owned 69 % of the land. Similar trends of concentration of land-ownership for other areas in the coffee, tea and ranching areas of Kiambu and Nakuru districts were found: 388 farmers owned 47 % of the total Africanized land in 1974. And this, according to Njonjo, 'is only the result of 14 years of Africanization.'⁹⁹

My own research in Nandi district during 1987 supports the view that the contemporary pattern of land distribution is unequal (see Chapters 5 and 6).

The data on income and land distribution among the smallholder population indicate that farm income and land became concentrated in the hands of a peasant stratum. This stratum may be labelled as relatively rich peasants who frequently employ wage labour. That particular fact does not necessarily imply that the rich peasant households are either 'kulaks' or capitalists.

On the other hand, we may identify a rather large peasant stratum engaged in commodity production based on the employment of family labour and casual wage labour. This stratum may be entitled as middle peasant households. Equally, a group of marginalized peasant households emerged who protect their means of subsistence by straddling agricultural production by selling their labour power. One must be cognisant of the fact that, for all three peasant strata, straddling of agricultural production, rural wage labour, petty trade, and/or government jobs is an essential ingredient of their farming strategy.

It seems that as a result of commoditization in Kenya, a sizeable proportion of the smallholder community and the landless does not participate advantageously. Peterson (1986) estimates that approx. 60 % of the smallholder population has benefitted significantly from economic growth patterns since independence. However, according to Peterson,

'the success of this upper 60 percent (...) leads to an increased concentration of land and income that may be deleterious to the (state's, p.h.) objective of maximizing total agricultural output and employment.'¹⁰⁰

4.6. Conclusions

The colonial period after the implementation of the agrarian reforms and the post-colonial period can be characterized by two major rhythms of agrarian change which appeared to be highly interrelated. The state is not only an important intermediary between the two. Largely due to planned state intervention in the past and present, the concrete conditions for estate, capitalist and household commodity production were established almost simultaneously. The first rhythm, particularly after independence is founded upon a continuation of indigenous accumulation through agriculture. The second rhythm represents a continuation of colonial policies after independence in promoting and facilitating the production of agricultural commodities by smallholders who became mainly oriented to the international market.

This chapter has indicated various components of agricultural growth patterns in Kenya. The Swynnerton Plan and the subsequent agricultural policies after the transfer of state power destroyed the elements in the earlier colonial policy which had long impeded the development of the productive forces (physically as well as socially) in the rural areas of Kenya. As a result, Kenya experienced fast growth rates in agriculture as well as in the industrial and services sectors.

The implementation of the 'agrarian revolution' since the 1950s, i.e. a combination of measures involving land tenure reforms, relaxation of restrictions on cash crops and the keeping of dairy cattle, land settlement, creating marketing facilities for the commercialization of agriculture and technology transfer to agriculture, as well as the market oriented farming strategies of the smallholder population contributed to a phenomenal expansion of commodity production. This, as argued in the introduction to this chapter, would suggest that a technological and administrative structure was created due to the implementation of state policy, which triggered off agricultural growth. Behind these facts several tendencies of agrarian change emerged in Kenya, questioning its real nature.

The implementation of state agricultural policy during the period immediately after independence and the early 1970s illustrated three critical features of agricultural growth in post-independent Kenya.

The early policies were more aimed at issues of *resource distribution*, governed by a strict legal regime of private property, than at the productive use of resources. The expansion of commodity production during the 1960s and early 1970s was merely a reflection of increased area under cultivation, of

the (limited) transfer of 'large farm' to 'small farm' use and of a shift from low value to high value crops rather than of increased yields per unit of land. After that period, increases in yields for crops such as coffee, maize, tea and wheat were realized due to the introduction of improved seed, fertilizer application and improved crop husbandry.

It may also be argued that due to the intensive farming styles of small-scale farmers, output increased twofold. This is supported by substantial evidence from independent as well as state sponsored research. And this has nothing to do with state policy as some researchers indicated. The bias in favour of the low-density settlement schemes and the more land-extensive farming style of its inhabitants, suggests this, although, this did not prevent those left out in the cold by the state from coming forth as highly productive producers obtaining high yields from small units of land.

This brings us to the way in which the state solved the land question after independence. Three elements were highlighted. Firstly, there was a planned intervention in land distribution by the state with the objective of reproducing the bimodal, colonial agrarian structure. State power was used to expand the basis of indigenous accumulation from its traditional focal area in Central Province to the former White Highlands. Secondly, it may be argued that the state preferred the establishment of a peasant stratum with holdings larger than average sizes in smallholder agriculture. Thirdly, there was a complete lack of intervention in the distribution of land in the former Non-Scheduled Areas which were non-settlement areas. The state thereby allowed the continuation of existing unequal land-distribution patterns which emerged before and during the colonial period. This unequal distribution of land was subsequently built into the process of post-independence processes of commoditization.

It is not surprising that the land tenure reform and associated measures have been valued negatively by many observers rather than just glorified.¹⁰¹

Thus, behind the economic growth rates, several other patterns of agrarian change emerged. Commoditization in Kenya is illustrative of the assumption that it has a regionally and socially differentiated impact. Socio-economic differentiation of the smallholder sector is one essential rhythm of agrarian change in Kenya. Besides that, empirical evidence points out clearly that peasant households may not be considered merely as agricultural producers. The 'agrarian revolution' generated a growth process of differentiation through which labour time is increasingly directed off the farm.

Regionally differentiated growth patterns are a second pattern which became visible. The difference in regional ecological conditions for commodity production is one reasonable component of the explanation. There exists, however, a clear institutional bias in state policy towards areas. The 'agrarian revolution' had most to offer for the high potential areas, i.e. the Highlands, mainly the tea and coffee zones to the east and west of the Rift. These policies offered the best opportunities for those areas with a well developed physical and administrative infrastructure, fertile soils and reliable rainfall patterns. The Lowlands, with less reliable rainfall and a less developed infrastructure, and particularly the arid and semi-arid regions stagnated considerably.

Third, the data presented indicate that within the small farm sector a wide range of farms (with related farming styles) emerged, ranging from relatively large farms to intermediate-sized farm and small household units. Although

there is no necessary direct linear relationship between holding size and production output, there is evidence that output became highly unequally distributed as concentration of output in the hands of the rich and middle peasantry took place in smallholder agriculture. This occurred at the expense of the poor peasant households and the landless. That wage labour is an important element in smallholder agriculture suggests that the degree of inequality in size of distribution of sales may reflect the establishment in the small farm areas of rationale and relatively efficient capitalist farms. The wage labour force is formed by the poor and landless households.

This questions the prevailing distinction made by planners between a large farm and small farm sector. A more constructive distinction for policy development may be based on different development perspectives: on the one hand, on an agricultural sector in which commodity production is governed by maximization of output and profit based on the employment of wage labour, and on the other hand, on a sector governed by household commodity production in which straddling agricultural production with off-farm work is an essential element in farming strategy in order to protect means of subsistence and to optimize household labour power.

Notes

¹ CBS distinguishes between 'large', 'gap' and 'small' or 'smallholder' farms. The distinction is based on holding size as well as location in the former Scheduled and Non Scheduled Areas. CBS defines large farms as 'those which used to be included in the former 'Scheduled Areas' less those which have been transferred for sub-division into land settlement schemes'. The average size of large farms is 700 ha, though there are some relatively small units among these also. Large farms range between 0 - 20,000 ha or even larger than 20,000 ha. In 1987, 87 farms were larger than 20,000 ha, probably most of them ranches in semi arid and arid regions. Most of these farms are individually owned and some by cooperatives. Cooperative farming involves for instance, 3 or 4 individuals together managing and sharing the profits of a large farm venture. The exact distribution of large farm land between cooperatives and individuals is unclear. The small farm sector covers all other areas in Kenya, including the former Non Scheduled areas. The sector contains holdings ranging according to CBS 'between 0.2 and 12 ha, though there are some outside this range'. Finally, the gap farms are the intermediate farms which are neither regarded as small nor as large farms. In the main these gap farms are not covered by the agricultural statistics. Only IRS IV (1979) contains a simple overview.

² Heyer (1976), p. 11. Smith (1976), p. 128 raises the same doubts.

³ The data are from Leys (1979b), p. 299. See also Leys (1975), pp. 84, 85, Hinga & Heyer (1976), pp. 222-255, House & Killick (1983) and Livingstone (1986), chapter 11.

⁴ Maintaining this position was not a smooth process. This is shown by Swainson (1980), chapter VII. She narrates how Brooke Bond Ltd, which was at the time of independence the largest single tea company in Kenya, tried to hold this position by gaining control over smallholder tea production. The attempts failed, however. The role played by the state, and particularly the KTDA, was crucial.

⁵ Leys (1978), p. 249. There is substantial evidence that the majority of the large farm purchasers were members of the Kikuyu tribe. In addition to Kikuyu, privileged politicians and businessmen of the Kalenjin were among the purchasers. Through political agreements at national level, ethnic factions of the Luo and Luhya were kept far away from the land market in the Rift Valley Province. See Anyang' Nyong'o (1989) and Leys (1975).

⁶ Ibid., p. 254.

⁷ Ibid., p. 249, citing evidence from research of Lamb (1977a) and Cowen (1974). See also 4.5.2.1.

⁸ See Leys (1975), pp. 73 ff.

⁹ Leo (1984), p. 109.

¹⁰ Leys (1979b), p. 299, Hinga & Heyer (1976), p. 223 and Leo (1984), chapters 5 and 6.

- 11 See a.o. Heyer (1975) p. 162, Smith (1976) pp. 138 ff. and Carlsen (1980) p. 75. Leo (1984), p. 184 provided the latest data on settlement based on estimates from the Department of Settlement. He cautions (p. 180), however, for an interpretation of these figures 'for they have been generated in an atmosphere of permanent crisis'. The figure on the number of families settled is not based on facts but refers to the number of plots demarcated. It appears that many people own more than one plot while many plots accommodate more than one family.
- 12 Okoth-Ogendo (1976), pp. 176, 178, and Mighot Adhola, S., Participation and Development Rural Development Policy in Kenya and Tanzania (1976), cited in Peterson (1986), p. 67.
- 13 Heyer & Waweru (1976), pp. 214, 215, House & Killick (1983), pp. 50, 51.
- 14 Leo (1984), chapter 6. The bias towards low-density schemes reflected also the opinions of the World Bank at that time.
- 15 Ibid. pp. 174, 175.
- 16 Leys (1979b), p. 312 and Livingstone (1986), p. 219.
- 17 Leys (1979b), p. 311, Smith (1976), p. 142, Heyer & Waweru (1976), pp. 217-219, Livingstone (1986), p. 230 and Large Farm Sector Survey, vol. 2 Main Report (1977), chapter 7. Hunt (1984) raises, therefore, the question of total land reform.
- 18 Leys (1979b), p. 313.
- 19 The replacement of sorghum and millet merits a comment. There might be several advantages in maize production. There are also numerous reasons to continue production of sorghum and millet especially in regions with less reliable rainfall patterns, e.g., the arid and semi-arid lands. Sorghum and millet are more drought resistant than maize and are of high nutritional value. Add to this the fact that compared with maize (particularly with hybrid maize) millet and sorghum can, in general, do with less agricultural inputs like fertilizers, irrigation and agro-chemicals. Until now little has been done to improve sorghum and millet while hybrid maize has received a lot of resources. According to Heyer (1975) p. 171, regions with less rainfall could have been in a much better position these days if agricultural policies in the past and present had paid more attention to millet and sorghum.
- 20 Integrated Rural Survey 1974-1975. Basis Report (issued in 1977), referred to in the text as IRS-I, The Integrated Rural Surveys 1976-79. Basic Report (issued in 1982), referred to in the text as IRS-II, III and IV, respectively. Agricultural Production Survey, 1986/87 (issued as Chapter 3 of the Economic Survey, 1989).
- 21 See IRS-I, tables 8.12 - 8.14. See also chapter 6.
- 22 Calculated from IRS-I, table 9.8 p. 83.
- 23 Bevan et al. (1989), table 2.5, p. 24.
- 24 IRS-II, III, IV, pp. 116-117.
- 25 Wheat production is also organized by agricultural contractors. This kind of wheat farming is not listed by CBS as a large farm sector activity. In Narok district in Rift Valley Province wheat farming is carried on the following way. These contracting companies lease land from several Maasai group-ranches which are paid a land rent (in 1987 KSh 180/- 200/- per acre (0.4 ha)) while the contractor pays the production costs and sells the wheat to the NCPB. These companies also contract wheat farming for individual farmers, i.e. from Kikuyus who settled at Narok in the beginning of the 1960s. Some of these companies are owned by Asian interest groups and the so-called Kenya cowboys (descendants from settlers who decided to stay in Kenya after independence). A large number of these companies are owned by African businessmen, politicians and ministers.
- 26 Bevan et al. (1989), table 2.10, p. 31.
- 27 Economic Survey (1987) p. 107. The Survey, however, stated that coffee production by smallholders declined. Figure 4.1 shows clearly that this is not true.
- 28 See Schmidt (1979) pp. 20, 21. See also IRS-I, table 8.12 - 8.14.
- 29 Ibid., p. 145.
- 30 Cowen (1986), p. 378, Peterson (1986), p. 69 and Booker International (1983), *Maize marketing in Kenya*. A report prepared for the World Bank and the Ministry of Agriculture and Livestock Development, Nairobi, quoted in Jabara (1985), p. 625, footnote 16. Schmidt (1979), p. 133 gives a figure of 50-55 %.
- 31 The data are derived from Buch-Hansen & Kieler (1983), p. 21, see also Curry & Ray (1987), p. 94 ff. and adjusted by information derived from Economic Surveys for recent years.
- 32 Cowen (1986), p. 356.
- 33 Cowen (1986), p. 356.
- 34 Cowen (1986), p. 370 and also Cowen (1983).

- 35 Data on production proportions are from Buch-Hansen & Kieler (1983), p 21 and adjusted by information derived from Economic Surveys for recent years.
- 36 African Business, March 1986
- 37 See Buch-Hansen & Marcussen (1982), Buch-Hansen (1980, 1981) The benefits of sugar arrangements are, however, relative Farmers in the sugar zones complain that 'sugar eats all', but their income from sugar production is far higher than non contracted farmers Tobacco farmers tend to neglect alternative cash crops as a result of the arrangements. See also Buch-Hansen & Kieler (1983), pp 28-31
- 38 See also Cowen & Kinyanjui (1977)
- 39 A study of Mureithi & Sharma (1984, table 3, p 153 and p 156) indicated a high degree of incomplementarity in intersectoral linkages Two important trends were highlighted In the first place, the food processing, agro-based industries, and other manufacturing and mining sectors occupy a crucial place in the total effect of linkages on other sectors of the economy These sectors rely heavily on agriculture for their raw materials In the second place, the agricultural sector ranks last in order among other non-farm sectors in forward and backward and total inter-industry linkages The inclusion and exclusion of imported items in total demand does not alter the lowest position in rank of the inter industry linkages. They explain this incomplementarity by the fact 'that agriculture mainly operates on traditional methods of cultivation' Their particular conclusion does not match, however, with the empirically observed and considerable employment of 'modern' means in agriculture, a subject which will have been discussed in section 4.3 This suggests either (i) that the overwhelming majority of farmers in Kenya employ locally produced implements and that their demand for these inputs is rather low and/or satisfied through non-recorded (informal) market relations, or (ii) that the greater share of modern implements is employed on farms owned by large scale farmers and rich households producing maize, wheat and sugar for the internal market.
- 40 See for instance World Bank (1982, 1984, 1985)
- 41 AIR/World Bank (1985), Annex I, table 1 The rest of the fertilizers is used for production of tobacco (1.6 %, by BAT(K)), barley (3 %, by Kenya Breweries), pineapples (1.3 %, mainly by Kenya Canneries), cotton (0.1 %, mainly in irrigation schemes), rice and potatoes (both 1.6 %), horticultural crops (2 %, mainly for export) and sunflower (1.1 %) This suggests that the so-called 'minor' or 'poor men's crops (beans, bananas, groundnuts, millet and sorghum) as well as the export crop pyrethrum, which cover together at least half a million hectares of medium and high potential land, receive virtually no fertilizer at all
- 42 See, for instance, the FAO Agricultural Production Year-book, various years
- 43 AIR/World Bank (1985), vol I main report, chapter IV
- 44 The IRS-IV survey estimated that Ksh 14.1 million is spent on tractor hire See also Chapter 6
- 45 ILO (1972), p 37
- 46 For an historical account of wage labour data, see also Sorrenson (1968), Heyer (1975), Kitching (1977, 1980), Bigsten (1980), Dietz & Koninx (1984) and Collier & Lal (1986)
- 47 See IRS-I, tables 8.32 - 8.35, Bager (1980), table 14 p 51, Collier & Lal (1986), pp 118-129, tables 5.1 - 5.3 and Bevan et al (1989), tables 2.2 - 2.4
- 48 Collier and Lal (1986), p 123
- 49 See Kitching (1977) and *Development Plan 1979-1983*
- 50 See Collier (1983), p 144, based IRS-I data
- 51 Cowen (1986), p 371
- 52 See also Collier & Lal (1984), p 1013 and ILO Report (1972), p 33-38
- 53 Kitching (1980) pp 153, 154
- 54 Ibid pp 153, 154 For the differentiation of Kenya's wage labour force, see chapter IX of Kitching's book
- 55 Ibid , p 373
- 56 Ibid , pp 316, 317
- 57 A major reason for the implementation of the 'new' policy in Central Province first was to employ it as an 'anti-guerrilla' or counter-revolutionary reform tactic 'Loyalists' were rewarded by the colonial administration by giving them the first opportunity to claim land for registration and freehold land title deeds, the 'freedom fighters' could not claim their rights to inherited tribal land because of their absence in the mountains See also Chapter 2, section 2.4
- 58 Kitching (1980), p 108
- 59 Heyer (1975), p 160

- 60 Ibid , p 158, 159
- 61 Bigsten (1977), p 21
- 62 For more details see Tait Davis (1977), pp 41-53 and Dietz & Koninx (1984)
- 63 See Dietz & Koninx (1984), table 14, p 76
- 64 Dietz & Koninx (1984), p 70
- 65 Ibid , table 12, p 69
- 66 Bevan et al (1989), table 2 10, p 31
- 67 For a detailed analysis of trends in social economic development in Kisii, Kisumu, Taita Taveta and Kwale districts see Carlsen (1980), for a detailed historical account of Siaya district Cohen & Atieno Odhiambo (1989), for developments in Western Province Lavrijsen (1984), for Bungoma district Norwegian Aid Review (1987), for Central Province Cowen (see list of reference), for developments in Coast Province Foeken & Hoorweg (1988) and van Oosten (1989), for West-Pokot district Dietz (1987), for Kisii district Raikes (1988) and Bager(1980), for Nandi district Chapters 6 and 7 of this book The author's travels through the country during 1979/1980 and 1985-1988 also provides information
- 68 Bigsten (1981), pp 183, 184 See also Dietz & Koninx (1984), pp 80-92, Bigsten (1980, 1984) and Vandemoortele (1983)
- 69 See AIR/World Bank (1985), Annex V and VII
- 70 See Kitching (1980), pp 334-373, Cowen & Kinyanjui (1977) and Cowen (1976, 1981, 1986)
- 71 See, for instance, Hunt (1977, 1984), *Review of African Political Economy*, nr 21 (1981), Carlsen (1980), Bager (1980), Kongstad & Monsted (1980), Lavrijsen (1984), Collier & Lal (1986) and chapter 6
- 72 Martin (1984), p 165 ff
- 73 Ibid , p 166 and Bevan et al (1989), table 2 12, p 33
- 74 Bevan et al (1989), pp 31 33
- 75 Collier & Lal (1986), table 5 2 , p 122
- 76 See, for instance, IRS-I, table 8 13
- 77 Greer & Thorbecke (1986) used the daily required per capita caloric intake of 2,250 cal as a minimum Furthermore, they assumed that the diet is composed of maize and beans in a 70/30 percentage proportion The food-poverty line is obtained by valuation in market prices Thorbecke & Crawford estimated the poverty line for rural households at Ksh 2,342 per annum Vandemoortele estimated the poverty line slightly lower, i.e at Ksh 2,269
- 78 Since their farm operating surplus is low and the holding small, this means that the farm is small and that consequently they do not have access to formal credits, they have to rely on private money lenders, who charge exorbitant profit rates or sell their labour power
- 79 Carlsen (1980), p 83
- 80 See Crawford and Thorbecke (1978)
- 81 Chenery, a World Bank staff member, estimated a Gini coefficient for the distribution of income in 1969 of 0.6, quoted in House & Killick (1983), p 34 The Gini coefficient is a concentration ratio which varies within the range 0 (total equality for any size distribution) to 1 (total inequality)
- 82 See Vandemoortele (1982)
- 83 Cowen (1974), p 1 ff See also Cowen (1981)
- 84 Bager (1980), pp 52-57 and Martin (1984), p 165
- 85 Collier & Lal (1984), p 1008 and Collier & Lal (1986), p 83, table 3 6
- 86 See a.o House and Killick (1983), p 39 They refer to table 6 15 of IRS-I
- 87 Smuth, L., Low Income Smallholder Marketing and Consumption Patterns Analysis and improvement, policies and programmes (Rome, FAO, 1978) and Dorling, M., Income Distribution in the small-farm sector of Kenya Background to critical choices (Nairobi, conference paper, 1979), cited in House & Killick (1983), table 9, p 37 The data of IRS-I were recalculated to per adult equivalent income groups in order to overcome the positive association between income and household size See also IRS-II,III and IV and Greer & Thorbecke (1986)
- 88 Crawford, E & Thorbecke, E., Employment, income distribution, poverty and basic needs in Kenya Report of ILO consulting Mission, mimeo, 1978, cited in House & Killick (1983), p 41
- 89 ILO Report (1972), p 36 In Chapter 2, section 2 1 it was stressed that concentration of land was already taking place long before the colonial period
- 90 Kitching (1980) pp 331, 332

91 ILO Report (1972), p 36

92 Dorling (1979), Income Distribution in the small farm sector, quoted in House & Killick (1983), p 46

93 See also Ljoodi & Ruthenberg (1978)

94 Vandemoortele (1982), pp 8-10 Livingstone (1986), p 294-298 provides data on land distribution obtained from IRS-II and IV The picture remains invariably the same

95 Martin (1984), p 166

96 Quoted in House & Killick (1983) p 47 Sorrenson (1968) and Leo (1984) trace the phenomenon of the landless back to the origins of colonialism

97 Ibid p 47 and Leitner (1976)

98 Collier (1978), Notes on the problem of rural poverty in Kenya (mimeographed), cited in House and Killick (1983), p 46

99 Njonjo (1981), p 39

100 Peterson (1986), op cit, p 65

101 See also Leys (1975), pp, 73-99, Okoth-Ogendo (1976), pp 173- 180, Smith (1976), pp 128 ff and Heyer (1976), p 11, ff

CHAPTER 5.

THE HISTORICAL PATTERNS OF COMMODITIZATION IN NANDI DISTRICT: FROM RESISTANCE TOWARDS CO-OPTATION

Introduction

In this chapter we shall analyze the trends in commodity production in the regional context, i.e., Nandi district. At district level we can depict more accurately the specific and localized trends in socio-economic development as a result of the expansion of commodity production.

The chapter is designed as follows. In the first section, we shall present some general information about the district: location, administrative set up, climatological and ecological conditions, population growth patterns, the major crops cultivated in Nandi district, land use and non-agricultural wage employment. In the second part, we shall examine the historical trends of socio-economic development in the district and the gradual incorporation into the market economy.

5.1. Nandi district: general information

Nandi district is one of the smallest districts in the Rift Valley Province. To the north and east, the district is bordered by Uasin Gishu district, by Kisumu and Kakamega districts to the south and west, and by Kericho district to the south-east (see map 2). The district occupies 2,745 square kilometres of land.

The district is divided into three administrative units (divisions), which are subdivided into 17 locations and 82 sub-locations (Table 5.1. and map 2). The district headquarters is at Kabsabet. The Nandi County Council covers the entire district, except for Kabsabet town and immediately surrounding area which is administered by the Urban Council. In the near future an Urban Council will be set up for Nandi Hills. Furthermore, the creation of another division (Kabiyet division) is foreseen in the future. The three divisions also serve as electoral constituencies for the district. The constituencies are led by three Members of Parliament.

Table 5.1. Administrative set-up Nandi district

Division	Headquart.	Number of locations	Number of sub-locations
Aldai	Kobujoi	7	34
Mosop	Kabiyet	5	22
Tinderet	Nandi Hills	5	26
Total		17	82

Source: District Development Plan, 1984-1988, p. 2.

The majority of the population are Nandi and belong to the Kalenjin-speaking people (approx. 70% of total population in 1979). The Population Census for

1979 estimates that about 15% of the population are Bantus (mostly Luhya); 6% are considered as Nilotics; and approx. 9% of the people belonged to other ethnic groups. The vast majority of the population live and work in the rural area. The population of the two urban areas, Kabsabet and Nandi Hills totalled 8,700 (i.e., almost 3% of the total population) in 1979. Population density is low when compared with the other districts in Kenya: an average of 1.09 persons per ha. for 1979 and 0.75 for the year 1969. Population density varies, however, per location and sub-location as well as per ethnic group. The locations and sub-locations of Aldai division, where the majority is Luhya, show above-average population density figures for 1979 (Kapkangani and Kemeloi location 2.74 and 1.65 persons per ha. respectively) while the locations in Mosop division, inhabited mainly by Nandi, show below-average figures (Kabiyet, Sangalo and Kosirai, 0.96, 1.06 and 0.92, respectively).¹

Table 5.2. Population growth in Nandi district, 1931-1988

Census year	Census name	Population
1931	Administrative Census	50,400 (37,000 in Reserve) (13,400 squatters)
1945	Veterinary department	50,000 (38,430 in Reserve) (12,000 squatters)
1948	East African Census	116,681 (78,693 in Reserve) (32,287 squatters)
1969	Population Census	209,068
1979	Population Census	299,319
1988	CBS Projections	448,686

Source: Huntingford (1953), pp. 2, 3; *District Development Plan, 1983-1988*, p. 9

Table 5.2 shows the available population figures for Nandi district since a first administrative census was held in 1931 by the colonial administration. The annual population growth rate from 1969 to 1979 is approximated at 3.65 %. CBS estimates growth rates between 1980 and 1999 at 4.19 %. At this growth rate, the total population in the district at the end of the 1983-1988 plan period is estimated to be 448,686.² One factor which has contributed to population growth during the 1970s has been immigration from nearby districts. This immigration has been stimulated by acquisition of land in Aldai division (particularly in Kapkangani sub-location) and by employment opportunities in the big tea estates and in forest areas.

The climatological conditions in Nandi district are considered to be favourable for agriculture. Agriculture is rain fed and irrigation is not used in the district. Mean annual rainfall in the northern half of the district ranges from 1,300 mm to 1,600 mm. The long rains are from March to September, with a maximum of rainfall in May and August. The southern half experiences annual mean rainfall ranging from 1,100 mm in the west to 2,000 mm to the east. Generally, rainfall is well distributed throughout the year with maxima

MAP 2 NANDI DISTRICT

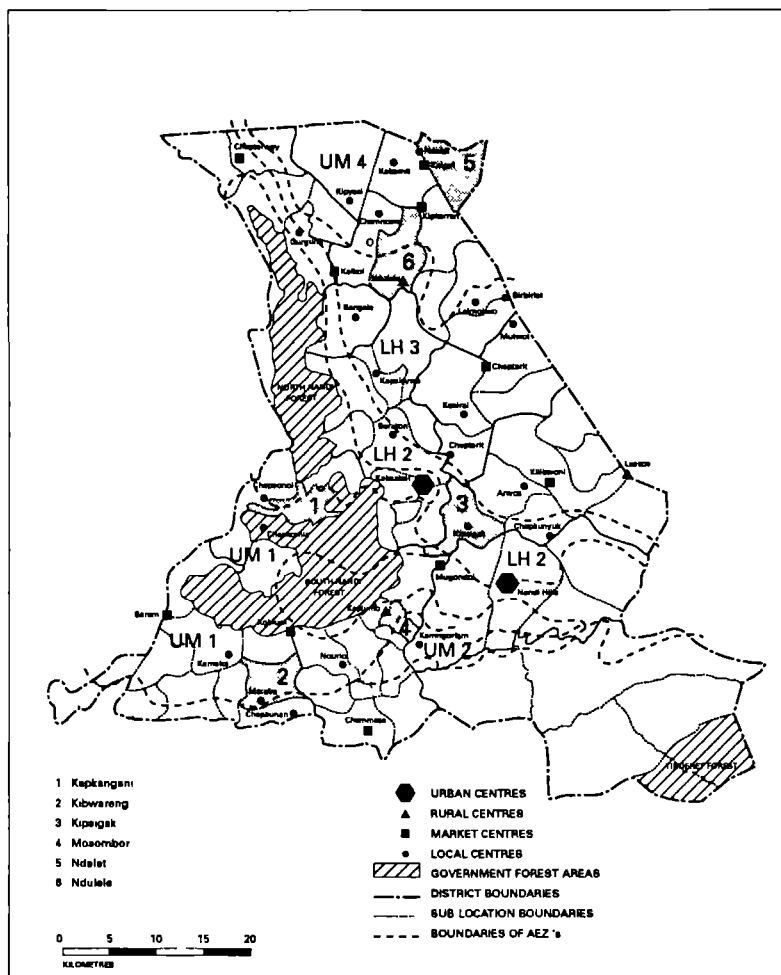


Table 5.3 Agro-ecological zones (AEZ) in Nandi district, in '00 ha.

AEZ	area	remarks/extension recommendations
<i>Upper Highland Zone</i>		
UH1	37	Sheep and Dairy Zone, very steep, therefore forest reserve zone Good yield potential for maize and very suitable for graded dairy farming.
<i>Lower Highland Zone</i>		
LH1	288	Tea-Dairy Zone with permanent cropping possibilities dividable in two variable cropping seasons. Very good yield potential for tea, good yield potential for maize and vegetables, very suitable for graded dairy farming
LH2	229	Wheat/Maize-Pyrethrum Zone with a very long to long cropping season, dividable in two variable cropping seasons. Very suitable for graded dairy farming, wheat, oil seed, vegetables.
LH3	477	Wheat/Maize-Barley zone with long to very long cropping seasons, dividable in two variable cropping seasons. Good yield potential for maize, wheat, oil seeds, wattle and vegetables, suitable for graded dairy farming
<i>Upper Midland Zones</i>		
UM1	314	Tea-Coffee Zone with permanent cropping possibilities, dividable in two to three cropping seasons. Very good yield potential for tea, beans bananas, fairly good yield potential for coffee (Arabica) Zero-grazing dairy farming recommended.
UM2	57	Coffee Zone with a very long cropping seasons and intermediate rains, dividable in two variable cropping seasons and rain periods. Very good yield potential for maize, fairly good yield potential for vegetables, fruits and coffee (Arabica). Zero-grazing dairy farming recommended.
UM2-3	93	Marginal Coffee Zone with a very long to long cropping season and intermediate rains, dividable in two variable cropping seasons and rain periods. No good yield potential, fair chance for medium maturing maize varieties
UM4	267	Sunflower-Maize Zone with a long to very long cropping season, dividable in two variable cropping seasons. Good yield potential for maize (late maturing), beans, sweet potatoes. Fairly good yield potential for vegetables and fruits. Suitable for graded cattle and dairy cows
<i>Lower Midlands Zones</i>		
LM1	12	Sugar Cane Zone. Very small potential
LM2	152	Marginal Sugar Cane Zone with a long to medium cropping season followed by a (weak) medium to short one. Very good yield potential for beans, sunflower, sorghum, good yield potential for maize (medium maturing), tomatoes, eggplants, fairly good potential for tobacco, cotton, sweet potatoes, sugar cane, sisal, pineapples Zero-grazing in dairy farming recommended
Total	1926	

Source: Farm Management Handbooks (1982), pp. 28-34

in April and May. Due to its ecology, the district is well watered. Natural water supply consists of several rivers and springs.

The temperature regime in Nandi is classified as cool to cold during the rainy seasons. During the months of October to February, when rainfall may be little, the climate varies from cool to warm in many parts of the district. The mean maximum temperature varies between 22 and 26 degrees Celsius except below the escarpment to the south and west where it may rise to 30 degrees Celsius.

Ecologically most of the agricultural land (233,900 ha) in the district is classified as high potential for both agriculture and dairy farming as well as forestry. See table 5.3. Vegetation in the district is green throughout the year. There are three types of soil components in Nandi:

- well drained, dark brown, sandy loam soils in the North and some parts of the southern area;
- well drained, dark red friable soils, partly covered with dry loam top soil in the north; and
- black cotton soil, common in the southern half of the district.³

Table 5.3 shows the classification of Nandi district in agro-ecological zones (AeZs). The classification of AeZs is based on altitude, rainfall and to a lesser extent on type of soils.⁴

The total rural area in Nandi district is 233,900 ha of which 192,600 ha is used for cultivation and dairy farming. The rest of the land is either unsuitable (steep slopes), forest reserve, swamps and lakes, or occupied by roads, homesteads and rivers). Maize production and dairy farming are the mainstay of the agricultural economy in Nandi. Besides maize and milk, other major commodities produced in Nandi district are meat, hides and skins and tea. Other agricultural products, but less important in terms of quantity and number of producers, are sugar cane, coffee, wattle and pyrethrum. See also section 5.2.4. Furthermore, a wide range of food crops (beans, millet), vegetables (sukumawiki [spinach], cabbages, onions, tomatoes) and fruits (bananas, pineapples) are grown; the greatest share of these products is consumed by the household itself, although some of the households have commercialized these commodities.

The district authorities estimate that roughly 40% of the agricultural land is cultivated and 60% is used for grazing. Land-use patterns vary, however, per sub-location located within a certain agro-ecological zone. The survey held in 1987 took six sub-locations and their respective location within the AEZ-classification scheme as a starting point (see map 2 and also Appendix I). The six sub-locations chosen for the survey were Kapkangani (situated in the UM1 zone), Kibwareng (UM1), Kipsigak (LH2), Mosombor (UM1/UM2), Ndalat (UM4) and Ndulele (LH3/UM4). Table 5.4 shows the land use in the sample sub-locations. In section 5.2. we shall deal with the historical land-use pattern in Nandi district. The table shows clearly that population pressure on the land in the southern region is significantly higher than in the northern region. Furthermore, Kapkangani is the only sub-location where land for cultivation of crops and livestock is equally divided. All the other five sub-locations show percentages between 16 % and 26 % for land under cultivation. The smaller average land base per household (see Chapter 6) and higher population density in Kapkangani sub-location and possibly the cultural background of the majority of its inhabitants, mostly Luhya agriculturalists, contribute to the exhibited land use pattern. Table 5.5. shows the land-use in the sample by land holding size. The difference is then even more significant.

Table 5.4. Land use and land available for people and livestock in the sample area by sub-location**

Sub-location (ha.)	% cult. area for maize (mixed/pure)	% grazing land (pasture)* (ha.)	Total agricult. land capita	Cult. area per cow	Grazing land per
Kapkangani	49	51	91.6	0.13	0.41
Kibwareng	23	77	43.4	0.11	0.50
Kipsigak	26	74	86.0	0.14	0.49
Mosombor	24	76	47.0	0.11	0.85
Ndalat	20	80	166.0	0.35	0.99
Ndulele	18	82	249.9	0.29	0.79

* including small patches of land for vegetable garden, bananas and export crops as well as land used for homesteads and granaries. These were not measured in the survey.

** included plots rented but excluded plots owned/rented outside sub-location and district.

Source: own survey.

Table 5.5. Land use and land available for people and livestock in the sample area by holding size**

holding size	% cult. area for maize (mixed/pure)	% grazing land (pasture)*	total agricult. land (ha.)	cult. area per capita	grazing land per cow
0-1	62.5	37.5	3.68	0.02	0.23
1-2	60.0	40.0	21.95	0.08	0.20
2-3	46.8	53.2	24.56	0.11	0.23
3-4	31.1	68.9	38.89	0.08	0.46
4-5	24.5	75.5	31.00	0.16	0.45
5-	20.9	79.1	563.78	0.30	1.08

* including small patches of land for vegetable garden, bananas and export crops as well as land used for homesteads and granaries. These were not measured in the survey.

** included plots rented but excluded plots owned/rented outside sub-location and district.

Source: own survey.

Land use on holdings larger than 3 ha. is more diverted towards livestock (70 % - 80 % of total area). The number of cows per hectare (as well as per household) is much higher (and consequently milk sales are higher) and there is still enough land left for maize production for commercial and subsistence purposes.

The following table shows the effect of the enormous variation in productivity of land (reflected in yields) in the sub-locations (or AEZs) as well as per holding size. This situation indicates the appropriateness of the two selection criteria employed. In chapter 6 we will return to this issue in more detail.

Table 5.6. Average yields per ha. (90 kg bags) and standard deviation by holding size and by sub-location in the sample* (N=response; between brackets non-response)

Holding size	Mean yield	Std	N	Sub-location	Mean yield	Std	N
0-1	15.5	6.6	6(0)	Kapkangani	22.2	10.2	21(8)
1-2	28.8	11.4	11(4)	Kibwareng	28.9	11.3	9(0)
2-3	22.8	13.5	7(4)	Kipsigak	48.6	9.5	3(3)
3-4	41.4	20.1	7(4)	Mosombor	38.3	20.8	7(4)
4-5	59.7	30.9	6(1)	Ndalat	45.4	11.0	10(0)
5-	48.4	20.7	7(3)	Ndulele	66.5	24.0	14(1)

*: including plots rented but excluded plots owned/rented outside sub-location and district.

Source: own survey

The majority of the people in NaNandi district make their living from farming, although, a combination of farming and income from a secondary occupation is of crucial importance for the smallest farmers in the district. Furthermore, local government and civil service (teachers, town clerks), transport industry, commerce and the tea estates provide wage employment in the district. The total estimated work force was estimated in 1979 at 66,000 (population 25-50 years). If this age group is widened to 60, the available work force in 1979 was 79,904. The work force regularly employed is estimated at 32,000 people (i.e. 40% of the working age population), mainly in tea estates. The rest are mostly employed on small-scale family farms and large-scale agricultural enterprises. A few are engaged in various forms of trade and handicraft industry. More details on farming strategies, distribution of income and land, and reliance on off-farm work will be presented in the following chapter.

The physical infrastructural development such as roads and communication networks is of a high level. A major bitumen road runs through the district, connecting Nandi district with Uasin Gishu and Kakamega/Kisumu district. A dense network of rural access roads serves the rural areas. Along these roads, a dense network of trading centres and market places has been established in the past, supporting the commercial and agricultural development in the district and satisfying the people's need for consumption goods.

5.2. History of commoditization in Nandi district

The history of Nandi district can be divided in four periods. As in Chapter 2, we distinguish the pre-colonial period (- 1895); the period after colonial rule was established (1895-1930), which was a period of non-co-optation and resistance; the 1930-1950 period, during which development within the confines of commodity production commenced and 'new' forms of administration were imposed; and finally the period after 1950 upto the present day, when commodity production rose dramatically and the state intervened in the mode of agricultural production.

5.2.1. The pre-colonial period

The Nandi have traditionally been portrayed as an essentially pastoral people whose subsistence was primarily based upon cattle. Migration to new pastures and, finally, settlement in the region which is now Nandi district is an intrinsic part of their history. Oral history research by others revealed that the Nandi originated from the Mount Elgon region, north of the Nzoia river.⁵ The emergence, growth and expansion of the Nandi during the pre-colonial period can according to Walter (1981), be divided into three sub-periods. The first of these periods (the *formation* period) is the arrival and formation of the people, beginning about 1500 and lasting into the last half of the 16th century. The second period (the *consolidation* period) is the one of slow initial growth and limited expansion, extending to 1850. The final period (the *expansion* period) is the one of internal change and rapid, although small, expansion beginning in 1850 and ending in 1905, when the Nandi were finally subdued by British colonial forces.⁶

During the *formation* period the Nandi met no resistance to settlement because apparently the land was empty. The area where the Nandi settled was initially small. It was located in the extreme southwest of the present district at the escarpment. The location seems to have been chosen primarily for reasons of defence.

The consolidation period was the period during which the Nandi society began to develop. The main social organization form was the clan, i.e., based on kinship relations within a restricted territory. Contacts with the neighbouring Wanderobo exposed them to rudimentary agricultural knowledge. Economically, cattle rearing became an important activity. Walter (1981) indicates the importance of cattle for the social organization of the Nandi. The importance of cattle to the Nandi lies in the implications it was to have for the divisions of society - the non-kinship divisions that were developing, along with the clan structure, as the society grew in size. The focus of Nandi life was the homestead. Larger groupings soon developed, however. One of the earliest was that of immediate neighbours. These groups (a *kokwet*) assisted and helped each other with tasks having large labour requirements. All the people of Nandi, particularly the adult males (boys, warriors (*murenik*), old men), were put into this division, belonging to one group only. Nandi society did not know chiefs and was markedly egalitarian. Very quickly, another division appeared. Probably conflicts between influential men in the community gave rise to the institutionalization of new groups (a *pororiet*). These groups, headed by an influential man, would break away and settle in a separate area from the *kokwet*, but still nearby. A significant change in the social division of the Nandi society was that the *pororiet* took over the duty of procurement, protection and care of cattle. But more importantly, the *pororiet* became the territorial and political unit in which the *murenik* were organized. As these new groups grew in number, new land was incorporated, particularly to the north and east of the original settlement area. Each of the *pororiet* operated independently of the others.

Until 1850, the Nandi lived and expanded in relative peace. They raided cattle from the Luo and Bantu peoples to the south and west, but these had been isolated, uncoordinated thrusts by the Nandi. The Maasai raids on Nandi territory did not limit their expansion. The consolidation period can be characterized by a condition of equilibrium existing between the Maasai and

the Nandi, in terms of area controlled. But by 1850, the Nandi had reached the edges of the protective terrain and vegetation. Further expansion could only occur in a different physical environment. Walter (1981) assumes that this would have required cooperation between the *pororiet* on a level then non-existent.

The expansion period was simply an extension of earlier movements. Nonetheless, while the amount of land occupied was not large, the territorial expansion of this period is crucial for two reasons. First, the expansion was the outward manifestation of an internal political innovation: the adoption of a spiritual and religious leadership, the *orkoiyot* (literally, a prophet). The adoption of this political institution was to have the effect of catalysing the latent military powers of the Nandi. This system originated from the Maasai. Second, the territorial, geographical expansion after 1850 covered a different physical environment, one traditionally avoided by the Nandi. Walter (1981) relates this geographical expansion to the adoption of the *orkoiyot*-system. It must have strengthened their belief in themselves.⁷

Walter (1981), Ellis (1976) and Huntingford (1953) explain the introduction of the *orkoiyot* in Nandi society as follows. Firstly, the Maasai, the then dominant military force in the region who developed a political spiritual leadership system (known as the *laibon*), were respected by the Nandi. Maasai *laibons* had great power in Maasai society. They were believed to have supernatural powers. This power includes precognition, clairvoyance, telekinesis and ability to control the weather and health and fertility of animals and people. These powers were inherited patrilineally by men only. Secondly, as a result of inter-Maasai conflicts, some Maasai sub-groups took refuge in Nandi society. During the middle of the 19th century, the Maasai became involved in a long series of civil wars. A sub-group of the Maasai, the *Losegallai*, were almost completely destroyed. The few who survived the clashes came to the Nandi and were absorbed into Nandi society. Similarly, the *Uasin Gishu Maasai*, Nandi neighbours to the immediate northeast, were destroyed some 25 years later, those who survived were absorbed into Nandi society. It is assumed that these sub-groups of the Maasai, and particularly a family of Maasai *laibons* among them, institutionalized this kind of Maasai spiritual leadership for the Nandi. The assimilation of the Maasai *laibons* was explained as follows:

'It was not unusual for a tribe to employ foreigners as sorcerers and, in this case, the Nandi presumably hoped that the *laibons* would help them against the *Uasin Gishu* and would have information about the areas raided by their fellow tribesmen. Immigrant *Uasin Gishu* settlers possibly persuaded the Nandi that Maasai power was dependent on the *laibon* system, and that it would be advantageous for the Nandi, who had imitated their rivals in other fields, to follow their example in this particular.'⁸

The end result of the Maasai civil wars was the removal, in some cases complete and in others partial, of several Maasai sub-groups. This created a vacuum of which the Nandi took advantage. As the *orkoiyot* became accepted by the Nandi and built up their power, aggressive raiding and warfare became more and more important for the Nandi. As the Maasai on the *Uasin Gishu* Plateau had been virtually removed during the inter-Maasai wars, the Nandi

took control over this area. The Nandi became the dominant power in Western Kenya during the latter part of the 19th century.⁹ Their military power was renowned even among the Arab slave traders. The presence of Swahili traders was therefore minimal. Several traders were killed by Nandi warriors. The Swahili traders did not start operating until the 1850s. Outsiders, including Europeans, generally regarded Nandi territory as impenetrable. No European traders were active there during the period of Imperial British East Africa Company rule over Kenya until 1895. This was not only because of Nandi hostility, however, but also because the Nandi showed little interest in European goods.

The *orkoiyot*-leadership system transformed a relatively unorganized and decentralized society into a centralized political military system under the leadership of a chief *orkoiyot*. According to Huntingford (1953):

'The chief *orkoiyot*, *orkoiyot ne oo*, is not an executive authority. He is not the 'chief' of the tribe, he is not a judge, and he is in no way a supreme or central authority to whom appeals may be made (...) his real functions are confined to that expertness which is founded on magic and religion.'¹⁰

The people believed that the ritual leader's powers of prophecy, witch finding and witchcraft exerted great influence on people's well-being. His powers extended to rainmaking, fertility of women and cattle. The *orkoiyot* sanctioned war, circumcision and planting. When he considered the time and weather conditions suitable for planting, the *orkoiyot* sanctioned the beginning of planting by saying *Okol* ('plant'). When a raid was planned, representatives of the *pororiet* in question approached the *orkoiyot* asking whether it could succeed and he gave them his blessing. The *orkoiyot* afterwards received tribute in cattle if the raid was successful.¹¹ The *orkoiyot* gradually came to fill a position of influence and to exercise a coordinating role over the *pororiet* groups. Not directly, but indirectly. Through a system of representatives in the *pororiet* groups, he had information on what was happening politically. When colonial rule was imposed, the person of the chief *orkoiyot* became a rallying point for Nandi resistance to British rule.

It is not surprising that the clan to whom the *orkoiyot* belonged grew very rich. The Talai clan, in particular, where supernatural powers were believed to be found in a greater degree than among other clans, became a powerful and rich clan. The Talai clan rapidly grew in size and influence and spread to all parts of Nandi territory. This practice on the part of the Talai was greatly resented, but little could be done against the Talai because people were afraid of their powers. This did not mean, however, that there were no conflicts between the Talai and the rest of Nandi clans.¹²

The economic basis of Nandi society was cattle. Wealth and social status were primarily reckoned in terms of cattle. The *pororiet* members herded stock which was often not owned by them. Cattle was frequently lent out to friends and relatives who enjoyed the usufruct of milk and blood. The stock was enlarged both by breeding and cattle raiding. In the first case, it was family property; in the latter case, the men disposed of the cattle as they liked. Cattle rearing was controlled primarily by men, but they had no exclusive property rights. Women, too, had some right to the cattle acquired by breeding and

could dispose of its produce. Land, for agricultural and grazing purposes, was not owned and was free for use by anyone in the community. Land was not viewed as a property. It was so plentiful that control over it was not a real issue in pre-colonial times.

Cultivation, however, has always played a major role in their economy. Eleusine, or finger millet, was the traditional staple crop. Other crops were sorghum, beans, tobacco, pumpkins and several indigenous green leafy vegetables. These crops were often grown in mixed gardens. Milk, meat and blood were other elements of their diet. Ideally, agricultural production, and eleusine in particular, was the joint product of husband and wives. The harvest was divided into two parts which were stored separately. The wife's share was used to feed the family and she traded the surplus if any. The husband's share was brewed into beer, which was important in discharging social obligations and in recruiting communal labour when necessary.¹³

Relations of trade traditionally existed between the Nandi and their neighbours to the south and the west, the Luo, Luhya and Terik. Trade which involved foodstuffs was largely in the hands of women. Certain points along the boundaries of their territory were recognized as trading centres. In times of food shortages, women would travel into the territory of neighbouring ethnic groups to exchange small stock (goats, sheep) for surplus grain. In the case of a Nandi surplus of grain and shortages in other areas, the process worked the other way. The Nandi maintained trade relations with their neighbours in the north, the Pokot, Tugen and Keiyo, from whom they obtained metal implements, hoes, axes and weapons.

The Nandi also started to grow wheat at the beginning of the 20th century and traded it on many occasions with the first European settlers.

5.2.2 The imposition of colonial rule and the Nandi Uprising

The colonial administration tried from the beginning to stop the raiding and looting practices of the Nandi. Their location near areas which were gazetted to become white settlement areas and their military power posed a severe threat to colonization of the northern parts of the White Highlands. Because of their location, the Nandi could not be isolated. The colonial policy towards them was twofold. On the one hand, the policy was shaped by the need to contain their military capability, mirrored in their removal to a Reserve. These controls had subsequently to be relaxed because Nandi labour power was needed on European farms. On the other hand, in the early period of colonialism, the administration did not attempt to create relevant development opportunities for the Nandi within the Reserve. The colonial administration did not do much beyond keeping military control and collecting taxes.

The Nandi resisted the imposition of British rule for a very long time and tried to keep the impact of colonialism in the Nandi area to a minimum. The killing of two white traders was followed by more raids on caravans on the Uganda road, constructed by the British, which crossed Nandi territory. These attacks led to a British government punitive expedition in 1895 which was, however, unsuccessful. The construction of a new road which passed through central Nandi and a government-built fort to guard the road gave the British the idea that Nandi was under their control. Continual attacks by Nandi warriors on caravans passing along the two major roads and on railway gangs and railway property, resulted in several punitive expeditions, in 1897, 1899,

1900 and in 1905 and 1906. The *orkoiyot* coordinated the Nandi war effort against the British. The last two military campaigns were truly massive expeditions as a result of which the Nandi were finally effectively subdued, though resistance was not totally crushed. After the defeat of the Nandi in December 1905 when a peace settlement was arranged, Nandi territory became clearly defined as a Reserve of about 700 square miles, and 1,250 sq miles was alienated for white settlement.¹⁴ Nandi territory became the first Reserve in colonial Kenya.

The impact of the last punitive actions was devastating on Nandi society and economy. Not only were 1,117 Nandi killed (estimated at over 2 % of the total population of about 45,000) but additionally 16,213 cattle (50 % of the estimated cattle population) and 36,205 sheep and goats were captured by the British and 4,956 huts and granaries were burned.¹⁵ The imposition of British rule which followed the military expeditions resulted in considerable loss of land. The Nandi *pororiet* in the north lost their lands on the Uasin Gishu Plateau as this fertile area was opened up for white settlement. These land alienations deprived the Nandi to the south of important grazing areas and salt licks for their cattle. Those Nandi resettled in the north found themselves in a marginal climatic area with less rainfall than in their previous location and unsuitable to crops normally grown. This resulted in periodic food shortages which in years of very low rainfall resulted in famine. Population pressure on the remaining land became a real issue in the early days of colonialism, as the Nandi strived to restore the numbers of cattle to a level sufficient to sustain semi-pastoral subsistence. These issues were important causes for resistance to colonization and, at the same time, for the later movement of Nandi as squatters onto European farms, many of which were located on former Nandi land.¹⁶

The first settlers who occupied the Uasin Gishu Plateau were Afrikaners from South Africa. Huxley (1957) has described the history of these first settlers. They arrived around 1907 and 1909 with their ox-wagons. The Uasin Gishu Plateau was ideal for the Afrikaner immigrants: far from the centre of government, perfect for wheat farming, and close to an abundant supply of squatter labour.

'They immediately started to break patches of 'veld' and sow their seed. But all the plants died. (...) They came in contact with the nearest tribe, the Nandi. It was remarkable that the relations with this proud and warlike tribe were always friendly. The Nandi kept the hills, the Afrikaner the plains, and neither attempted to interfere with the other. When the first crop failed, several of the new settlers bought some wheat at Kibiyet from the Nandi, and from it they got their first harvest.'¹⁷

The wheat had been distributed among the Nandi two or three years before by the Agricultural Department. The Nandi appeared to be good farmers as

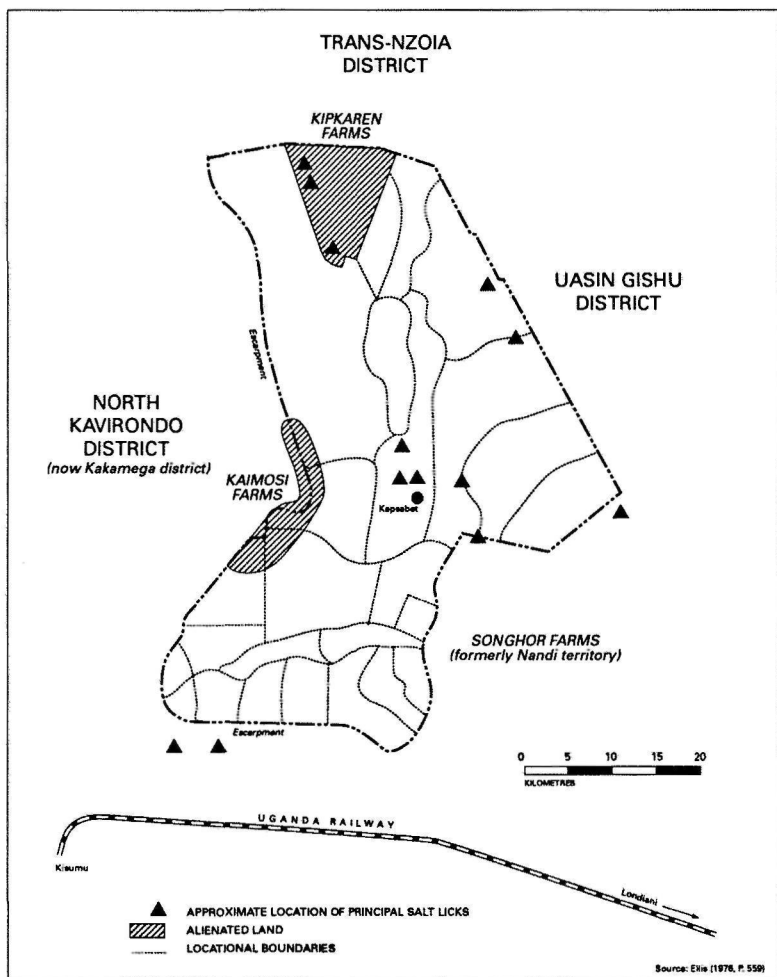
'in 1909 the Nandi exhibited an excellent sample at the Nakuru (Agricultural, p.h.) Show. Apart from a small crop harvested during the year of the trek by Johan van de Waal (approx. 1907, p.h.), this was the first wheat to be grown on the Plateau.'¹⁸

The Afrikaner settlers also traded with the Nandi for cattle. The Afrikaners brought quite a number of stock with them. But soon almost all the imported cattle died and only a very small herd of Afrikaander cattle stayed alive. As stock disease was rampant, the Afrikaner increasingly relied on wheat production.¹⁹

Land alienation apart, the Nandi found the economic burdens of colonial rule in the decade before World War I easy to meet. The demand for taxes after the imposition of hut and poll tax law was mainly met by the Nandi by selling off sheep and goats and agricultural products. The Nandi were not forced during this period to meet settler demand for labour the same extent as other ethnic groups in Kenya. The Nandi showed little interest in farm labour, or public works labour such as road building. Enlistment in the army and police or taking part in the lion hunts organized by the Uasin Gishu settlers, represented, however, a very attractive alternative for the defeated warriors. Quite large numbers of Nandi took part in World War I as soldiers of the Kenya African Rifles where they formed a separate Nandi Company.²⁰ The enlistment of Nandi in the army and police force brought cash money into the Reserve by which taxes could be paid.

Squatting by Nandi became important after 1913. Nandi began moving to settler farms as *squatters* and the number increased steadily. Nandi never saw a pattern of male labour migration to cities or (tea) estates, leaving women to manage the subsistence economy. The Nandi entered the labour market primarily as squatters, and whole families and stock moved together. In fact, many of the squatters did not work at all, but paid for the right to squat on the settler farms with milk or other produce. The economic and political weakness of the settlers in the area allowed the Nandi to move freely. Squatting met the needs both of the settlers and the Nandi. For the settlers, it provided a much needed labour force and the Nandi were the only neighbouring people from whom cattle could be procured,²¹ while for the Nandi, squatting meant access to grazing land. Initially, squatting alleviated some of the disadvantages of the land alienation practice. The Nandi felt that they returned to their former lands with little change in their traditional way of life. Squatting allowed traditional relations of production to be maintained intact, until a later point in time. The fact that they had no legal title to the land was in those days viewed as immaterial and irrelevant. The Nandi had no experience with property rights to the land, as land was plentiful, control over land was never a real issue among the Nandi.²² Squatting also had another advantage. Once outside of the Reserves, squatters were not subject to the pass regulations and they had much greater mobility than those who stayed behind in the Reserves. The squatters avoided paying taxes regularly. A major advantage of squatting was that they could escape the imposition of collective punishment for cattle thefts.²³ Equally important was the fact that squatting established strong links between the squatters and the people in the Reserve. Most of the squatters' cattle on the settler farms belonged to people in the Reserve.²⁴ Although the squatters did not own the cattle, they could use the milk and the blood. Cattle in Nandi were traditionally lent out to friends and relatives who became cattle caretakers. They were organized in the so-called *porriet* (see section 5.2.1).

Thus economic independence of the Nandi in the early period of colonial rule resulted in a large degree of political independence. The creation of local



successful until after 1923. The problem was that the potential headmen had little government backing, while they often had to face the opposition of their people to unpopular demands, such as forcing out labour for public works and the reporting of cattle thefts. Furthermore, the squatting system undermined the attempt to create such local authorities. It entailed a loss of control over the Nandi and thus became an important supplementary reason for squatting.²⁵

The relative peace in Nandi district characteristic for the period before the First World War was, however, disturbed by the colonial authorities. In Kenya as a whole, pressure on Africans, exercised by the government and the settlers, increased substantially. State policy was designed to increase white settlement in Kenya. Settlement schemes were set up to achieve this goal and led to further alienation of land in Kenya as a whole. These schemes brought a large influx of white settlers. The Soldier Settlement Scheme, for example, pushed former British WWI-soldiers to settle in Kenya as farmers. In addition to that, new legislation restricted the mobility of African labour and resulted in reduced wages. Taxes and the more active intervention of local administrative efforts forced many more Africans onto the labour market. All these developments had important repercussions on the Nandi. The early twenties (1920-1923) became a period of unrest in Nandi, an organized campaign of non-cooperation. Tax paying and labour controls were massively evaded by the Nandi. Several factors contributed to the 'Nandi Uprising'.²⁶

The Nandi protested strongly against the alienation of further lands from the Reserve, as this was not part of the peace settlement negotiated in December 1905. In 1920, 130 sq miles, i.e., about one-fifth of the Reserve, were incorporated into the Soldier Settlement Scheme.²⁷ The land alienated, the Kipkaren valley, was among the most fertile parts of north Nandi and an important grazing area containing several salt licks. This alienation of land meant the removal of 1,500 to 2,500 residents. New land grants to white settlers were also made at this time in the Kaimosi area on the southwestern side of Nandi Reserve.

The impact of these land alienations was not only that access to salt licks was denied, but also that more Nandi were forced to become squatters on settler farms. These disruptive colonial actions disturbed the relations between the Nandi and the colonial administration and settlers. The Nandi were angered by these land alienations, but the government did nothing to correct the situation.

In addition to that, taxation tripled between 1909 and 1920. The impact of the increase was aggravated by a shortage of cash. Due to fear of rinderpest following an epidemic, a stock quarantine was imposed on the Reserve from 1921 to 1923. As there were few opportunities for wage-labour and as the Nandi were unable to sell cattle outside the Reserve, the quarantine cut off the Nandi supply of cash. As a consequence, payment of taxes was refused on a massive scale. The quarantine also hindered the flow of squatters and their cattle to and from the settler farms. The purchase of grain in years of shortages was cut off too by the quarantine. The quarantine, continuing through 1922 and 1923, brought hardship in the Reserve.

In the meantime, pressure on the Nandi to supply labour for public works increased. The Nandi generally showed little interest in working on road and railroad construction. The administration made plans to force the Nandi to work. Labour registration began in 1920. Deserters were brought to court. This

work Labour registration began in 1920 Deserters were brought to court This labour conscription also contributed to the build up of unrest and antagonism towards the colonial administration The Nandi, and particularly the *murenik* among them, preferred to look for work as herdsmen on settler farms despite the wages in railroad construction being twice that for squatters Farm labour was generally refused when the compensating advantages of grazing cattle and cultivation rights were denied by the settlers during the quarantine The Nandi became squatters to avoid wage labour conscription and for the sake of the grazing and cultivation rights This implied that settlers could cut squatter wages, which they did in 1922, without fear of losing their labour supply

While the Nandi increasingly moved as squatters to the settler farms, the colonial administration was losing control over them The settlers fostered this loosening of control by encouraging squatters onto their farms without their being registered, by allowing them to reside on unoccupied farms without supervision, and by giving them passes to move from farm to farm For half the year the squatters had no labour obligations and had relative freedom The white farmers were afraid of losing their labour if they stuck to the letter of the Resident Native Labour Ordinance²⁸ This ordinance obliged squatters to work for 180 days a year in settler employment, it was not, however, incumbent on the adult male to perform these duties, since members of the family split their labour obligations In such a loose situation, the system of local councils of elders and appointed headman was not as easily transferred as was done in other areas in Kenya The leadership vacuum was only partly filled by the captains of the *murenik* (the *kiptainenik*) As a result of the loss of control over the Nandi, cattle raiding occurred more frequently

Along with this loss of control, the influence of the *orkoiyot* revived The administration attempted to control the situation by making the *orkoiyot* an instrument of local administration by appointing them as chiefs These attempts failed, however, since the colonial administration misjudged the nature of the *orkoiyot's* position Their position is built on spiritual powers and not based on initiating, but coordinating, raids Their powers could not be inherited or chosen by the administration The attempts to transmit labour demands and prohibition against raiding to the *murenik* through the officially appointed *orkoiyot* met little success Moreover, the *orkoiyot* influence lay outside the control exercised through the headmen Instead of their influence diminishing, the *orkoiyot* could build up more power over the *murenik* in the situation where cattle raiding increased This power was based on the organizational network of *orkoiyot* control over the *murenik* and was focused on the revival of traditional ceremonies associated with preparations for war and was directed against the local representatives of the colonial administration and the settlers One of the *orkoiyot*, Barserion, became by 1923 the most powerful *orkoiyot* in Nandi whose influence rivalled that of the colonial administration itself

Ellis (1976) and Arap Magut (1969) explain Barserion's leadership in the colonial context and not in the socio-anthropological context A combination of political and economic factors are relevant for the understanding of the *orkoiyot* revival Politically, the African squatter had no legally recognized channel for the articulation of his interests²⁹ In addition, the Nandi had no literate spokesman, such as Harry Thuku and Jonathan Okwiri who were organizing the political protest among the Kikuyu and Luo against the colonial

administration at the same time, instead the Nandi turned, as was their custom, to their *orkoiyot* ³⁰ While the *orkoiyot* were building up their influence, the government appointed headmen had no influence, indeed, the contrary was the case. This was even recognized by the administration itself. The headmen were deprived of their payment for the last quarter of 1922 by the Governor for not exerting more pressure on the young men to go out and work. Barsenion, himself a squatter on Uasin Gishu farms, filled this vacuum accurately by guiding the energies of the *murenik*. His leadership was a product of his role in countering the colonial situation, particularly government restrictions on cattle raiding and increased labour demands on squatters. At the same time, through the effective influence of the *orkoiyot*, but more importantly, through the common grievances which the protest expressed, it came to include both the traditional authorities and the few educated Nandi, the more conservative elders and the young *murenik*, and Nandi resident both in and outside the Reserve. The role of the elders and the educated in this protest is illustrative of both the generalized character of the protest and the general lack of relevant development opportunities offered by the colonial administration in the Reserve.

The protest, until now a passive resistance of not paying taxes and avoiding labour conscriptions, opposing cattle inoculations and obstruction of government attempts to control cattle raiding, and - on the settler farms - the opposition of squatters to settler labour demands, became increasingly violent. The *orkoiyot* channelled the protest and increased their activities. Barsenion called for a general *sagetab eito*, a traditional ceremony which had not taken place since 1892. The elders supported the injunction that all Nandi, in and outside the Reserve, had to be in the Reserve for the ceremony. This ceremony entailed the complete withdrawal of all Nandi labour from the settler farms. They left with or without their employers' permission. The colonial administration envisaged the potential danger of the gathering. Cattle raiding would be increased, and the attempts of the administration to assimilate the Nandi into modern conditions and closer administration control would be endangered. Barsenion and four elders were arrested before the ceremony was to take place. His arrest and removal to Meru put an end to the organized campaign of non-cooperation.

The function as well as the influence of the *orkoiyot* eroded gradually. The gradual coming of socio-economic changes and increased opportunities for socio-economic development, as we shall see in the next section, coincided with a gradual erosion of the traditional structure of Nandi society - a society in which the position of a spiritual leader became a lost cause. Barsenion's role in particular was, however, not totally finished, as he, was again placed in a position to channel Nandi protest when in the 1950s the land issue became a real issue.

The Nandi Uprising differs from other protests in the colony because of its traditional form and tactics and because it was local in its focus. No nationalism underlay their protests, to mobilize their own people was the aim. The protest partly reflected the failure of the colonial administration to create agents within Nandi whose positions, like those of the Kikuyu chiefs or Kamba headmen, were dependent on government patronage and brought increasing exploitation of their subjects. Unlike the Kikuyu who found through education a means of escaping the rule of colonial chiefs and

establishing economic independence in urban employment, the Nandi found education economically irrelevant and culturally alienating. There were very few 'watu wa mision' among the Nandi and these had no social basis for their appeal outside the traditional leadership of elders and headman. Ultimately, the traditional form of the protest mirrored the relative lack of socio-cultural change and the prolonging of the traditional way of life in Nandi, compared with the Kikuyu in this period. Squatting was an important ingredient economically, because it relieved the impact of the alienation of land, politically it allowed the Nandi, and particularly the *murenik*, to escape from colonial controls over Nandi movements and labour conscription.

5.2.3. The 1930s and the gradual expansion of commodity production

The Nandi Uprising, accompanied by other unrest in the colony at about the same time, prompted the government to implement policy changes almost immediately. In line with this new attitude, the administration was willing to undertake action to correct some Nandi grievances. The immediate changes in state policy toward the Nandi included the removal of the quarantine, the return of alienated land not yet occupied (although very little alienated land was actually returned in the end), reduction of hut tax pending the removal of the quarantine and immediate access to salt licks. Cattle still held by the administration were returned and the *kiptainenik* were appointed as paid government headmen. All these policy changes were implemented within the year, alongside increased police powers over the Nandi. The government also made plans to open a school in Nandi, one of the first in the country, which opened in 1925. One of the functions of this school was to counter the influence of the *orkoiyot*. These policy changes greatly circumscribed the basis of the *orkoiyot's* appeal, while the chiefs and educated elite, who were offered new and much better opportunities than before, increasingly found the agitation associated with the *orkoiyot* a threat to their new positions within the colonial structure. Economic development and integration into the commodity economy were on their way, and this reduced the ground for protest along traditional lines. Instead, political and economic life became greatly influenced by initiatives from the Local Native Council.

The Nandi squatters returned to the settler farms and paid their taxes for the first time in years. Squatting remained a major economic source for the Nandi and continued to be so for quite some time, despite low wages the general brutalities of the settlers against squatters. In 1931, the District Officer noted that 90 % of all adult males were at work outside the Reserve in November of that year and that the average for the whole year had been 69 percent. In 1935 the average figure had increased to 73 % with 40 % of all adult Nandi males being squatters on the farms of Uasin Gishu. Although these percentages were exaggerated due to a persistent underestimation of population and even assuming an exaggeration of 20 % it is clear that a very considerable proportion of all adult labour power was absent from the Nandi Reserve for long periods of the agricultural season.³¹ The cattle belonging to Nandi squatting on Uasin Gishu settler farms accounted in 1947 for 150,000 head, a figure representing about 40 % of all cattle in that area.³²

The 1930s saw the beginning of a gradual integration of Africans in the cash economy all over Kenya. Nandi Reserve was one of these areas. It was during the 1930s that consumer demand for items such as cloths, blankets, tea and

sugar began to be significant. A major development plan was drawn up for Nandi Reserve in 1934. The plan called for a further development of maize cultivation and also for the encouragement of potatoes, beans, linseed, peas and the planting of wattle and eucalyptus. This was thus the period during which commercial production by the Nandi economy became firmly implanted. Access to cash fuelled the demand for consumer goods, which in turn promoted dependence upon sources of cash. Commodity production was primarily based on livestock and maize. Commercialization of agricultural production spurred, at the same time, the development of commodity relations in the district. The number of trading centres increased over time. Commercial activities and the location of trading centres were, however, strictly controlled and planned by the district authorities. The establishment of trading centres in the district was restricted by an ordinance issued in 1932 in order to prevent uncontrolled commercial development. The effect of this control was such that ribbon development along roads was hindered and the proliferation of commercial centres was stimulated. This pattern is still in operation today; within each sub-location a politico-administrative centre serves as a commercial unit as well.³³

There was another reason why 1934 can be marked as the year an intensification of development in Nandi Reserve. The Local Native Council received 5,000 Pounds as a compensation for the land alienated from the Reserve. A major share was used to build a hospital at Kapsabet. The remainder of the funds were used to construct roads and several new schools. A portion of it was directed to the budget of the Veterinary Programme at Baraton.³⁴

The colonial administration's change in attitude (see Chapter 2) brought about a period of support for African cultivation of maize as a cash crop. Those who remained inside the Reserve were forced to decrease the size of the herds. By 1920, many of these families turned from pastoralism to small-scale agricultural production. Maize had been introduced and adopted both for home consumption and for sale. These efforts coincided with the stock quarantine and the heavier tax demands. At the same time, a market for food emerged in the district in the form of the development of European-owned tea plantations near Nandi Reserve. Maize was needed to provide food for the African workers. This provided an impetus to planting maize which was not negated when the quarantine was lifted. It was in the early twenties that the planting of maize as a cash crop began, expanding in the mid 1920s. Over time, maize became the staple crop and gradually became a subsistence crop as well. Millet was slowly replaced by maize. The move towards maize was probably encouraged by a failure of the millet crop in 1939, while maize prospered at that time. Table 5.7 shows the increase in maize exports from Nandi district during the thirties.

Generally, maize production was encouraged by the favourable climatic and soil conditions in the district. The drop in the price of maize in the mid 1930s was compensated for by a large volume, the great advantage of extensive maize growing and the increasing employment of ploughs instead of hoes. The adoption of maize cultivation in the Reserve increased the competition for land with cattle considerably. Throughout the 1930s and early 1940s, the Nandi squatter stock increased at a greater rate than the stock in the

Table 5.7. Maize exports from Nandi district, 1930-1939

year	output
1930	n.a.
1931	n.a.
1932	15 bags
1933	38 tons
1934	181 tons
1935	202 tons
1936	21 tons
1937	75 bags
1938	n.a.
1939	n.a.

Source: Kitching (1980), pp. 98, 99.

Reserve. This resulted in the situation that the connection between the Reserve and squatters outside the Reserve began to break down, because over-grazing in the Reserve was severely limiting the option of returning stock. The forcible removal of squatter stock to the Reserves was often used by settlers as a means to control squatter cattle. The forced removals increased the pressure on the Reserve economy considerably, while the squatters became more dependent on settler land. Their position was becoming increasingly vulnerable. Youé (1987) considers this as 'the transformation of labour tenancy to rural proletarianization'.³⁵ Attempts to enforce more control over squatter labour, and to eliminate squatter stock, led to a mass exodus to the Reserves. Overstocking in the Reserves was reaching crisis point by the late 1940s. This closed off the option for squatters return. The return of squatter stock became a real issue in this period. When in 1956 the Nandi District Council accepted legislation on land enclosures (see below), destocking and branding, the border with Uasin Gishu district was closed and this cut off the squatters from the Reserve almost completely.³⁶ Attempts to organize the Nandi and Elgeyo squatters in a Resident Labourers' Association failed in 1948. Discontent was more usually expressed through tribal societies or religious revival movements.³⁷ *Orkoiyot* Barserion, as we shall see later, again played a role in the squatter protests during the late forties and early fifties.

While cash crop cultivation rapidly gained ground during the 1930s, the administration believed that the future of the Nandi economy lay in cattle. Agriculture was seen as a way of bringing the people to rely more on grain than on milk for subsistence, thus releasing animal products (especially dairy) for export. In order for this plan to work, one of two things had to happen: a) milk production had to be greatly increased; or b) home consumption of milk had to be reduced. The administration initiated a veterinary programme and a demonstration herd and dairy at the Veterinary Station at Baraton. 'Upgrading' of stock, artificial insemination, combating diseases by building dips, and controlling over-grazing through placing limits upon herd size were the measures employed by the colonial administration. Field dairies were set up to buy local surpluses of milk and by 1939 there were six dairies operating throughout the district. Upgrading of stock encountered opposition. Ownership of exotic high-producing dairy cattle was forbidden for Africans; it was only a white settler privilege. The stock chosen for upgrading was

Sahiwal, a type of cattle that, though superior as a meat source and for draught purposes, does not give substantially more milk than indigenous cattle. The Nandi showed little interest in this programme. It did not bring more milk, i.e., what they wanted. Since they had no access to high milk producing cattle, the only option for the production of more milk was to sustain large numbers of low yielding cows.³⁸

The increased cultivation of land for food crops left less land for grazing and, although over-grazing never became too critical in Nandi region, the Nandi were pressed to reduce the number of cattle. Since the cash-generating potential of cattle was limited - the Nandi had no access to graded cattle, and meat prices were rigidly controlled and regulated - the Nandi turned increasingly towards the cultivation of maize for both cash and subsistence purposes. With the partitioning of land, the social issue shifted to a large extent from a community to an individual concern. The Nandi were forced to decrease the size of herds and to change from lineage-based to family-based pastoralism on a smaller scale than the traditional herds.³⁹

The adoption of maize in the Reserve as a staple crop was soon followed by the introduction of ploughs. The Local Native Council developed a scheme to provide the Nandi with ploughs and water mills. This gave the Nandi access to means to increase the acreage under maize. The scheme was not successful initially. The number of ploughs employed on Nandi farms and issued by the Local Native Council was 4 in 1927. The number of ploughs increased during the following years from 51 in 1935 to 250 in 1939. Regrettably, the number of Nandi participating in maize growing is unknown. The District Officer (DO) reported in 1931 that 'our native partner near Kabiyeet put a considerable area under cultivation () Arap Boit a sub-headman of Location 7 and Sam of Location 8 are two others who are annually extending their acreages under the plough'. In 1934, the DO was able to enthuse that 'for the first time known the Nandi had a real surplus of maize and sold in an appreciable quantity'. Agriculture was 'slowly but steadily extending'. In 1935, he reported only 'that there are some Nandi who grow maize on a fairly extensive scale, their farms running up to forty acres or so'.⁴⁰ After 1936 maize production dropped significantly. The sharp drop in prices and the fact that Nandi maize faced stiff competition from maize grown by Kikuyu squatters on nearby settler farms must have contributed to the decline in maize production. In addition, the price of cattle increased sharply and heavy rains ruined a large part of the maize crop. For the years 1937 to 1939, the available figures are unreliable. The drop in production cannot be explained by soil conditions - which were favourable - or by the level of prices - they were the same as in other areas where maize production prospered.

The declining curve of Nandi maize production over the latter part of the decade (Table 5.7) must have been due to other factors. Kitching (1980) suggests three possibilities.⁴¹ In the first place, production appeared to expand most rapidly in the early thirties when grain prices were lower but grain/stock barter terms were very favourable. It certainly seems significant that after stock prices rose in 1936 and production fell due to climatic factors production then did not recover even in subsequent seasons. Secondly, in comparison with other areas where maize production increased steadily, such as Kipsigis and Kikuyu land, Nandi producers lacked a buoyant and expanding market for local maize and maize flour, on the lines of the huge Kericho estates and

the Nairobi market. Both the local Nandi farms and the farms of Uasin Gishu and Eldoret seem to have become increasingly self-sufficient in maize and maize flour for non-resident workers, largely through the efforts of Kikuyu squatters. Nandi's other market, North Kavirondo (in 1933, 30 % of Nandi maize was purchased by dukas on the North Kavirondo border) was also increasing its own production over this decade and may thus have been a declining outlet. Thirdly, the already mentioned high proportion of absent adult male labour power in the district in that decade placed an extra burden on the female labour force and must have had a considerable negative impact on the extension of cultivated area and production. It certainly seems significant that Nandi maize production again resumed its exponential growth in a period - 1941-1945 - when a great deal of Nandi squatter labour was being compulsorily returned to the Reserve from the Uasin Gishu farms.

The combination of high wartime prices of the Maize and Produce Board, a markedly increased administrative effort plus the new availability of Nandi male labour power together produced the explosive expansion of the cropped area and of marketed production in Nandi in the forties. The common pattern was expansion of maize monocropping with the plough. Table 5.8 shows the quantities of maize formally marketed from the district over these years.

Table 5.8. Marketed output of maize, Nandi district 1940-1952

Year	Output (tons)
1940	94.6
1941	277.6
1942	316.9
1943	probably small or nil - drought
1944	1785.7
1945	2678.5
1946	357.0
1947	806.1
1948	?-drought
1949	-
1950	3928.5
1951	1785.7
1952	?-drought

Source: Kitching (1980), p. 147

As the increase in maize output was no smooth and linear process, there being frequent downturns due to droughts in certain years (1943, 1948, 1949, 1952), the Reserve became a net importer needing to purchase food to feed both people and livestock. It is clear from observations in the district reports and from the occasional mention of increases in the number of ploughs in the Reserve that the area under maize increased markedly over these twelve years.

By 1946, as Nandi squatters and their livestock returned from the settler farms of Uasin Gishu and other areas, the District Officer was so concerned at the reductions in the area of 'communal' grazing caused by the large extensions of ploughed land that he had the Local Native Council pass a motion restricting the issue of ploughs to two for each kokwet, in the district.

In response to this situation, in addition to ploughing, 'the more advanced natives' (words of the District Officer in 1949) were beginning to fence their land. The Local Native Council decided to endeavour to control, but not to prevent, this inevitable trend toward fencing. By 1952, these attempts at control of individual holdings had taken the form of Local Native Council rules laying down maximum acreage and attempting to prevent uneconomic subdivision of holdings by inheritance. There were also attempts to control rights of land disposal or sale. According to Oboler (1982), the start of land enclosure by individuals had already commenced in the early 1940s. My own research in Nandi during 1987 supports Oboler's views. The process intensified in the late 1940s, abetted by policies of the colonial administration. The 1940s thus saw the gradual beginning of land enclosure and the commoditization of land.

The basis of commodity production was in this period maize and cattle. Oboler (1982) stresses that the advantages of commodity production were confined primarily to men. It brought cash into the hands of Nandi men almost to the exclusion of women. Incorporation into the cash economy did not change the pre-colonial forms of distribution between men and women. Cattle remained men's business and maize production came to be under male control.

Several economic activities gave women access to a little cash. The production of vegetables remained an exclusively women's concern. The surplus was traded on the expanding markets in the district. Tea estates, mission compounds and a growing number of boarding schools provided these markets. Poultry rearing and the sale of eggs were another source of cash for women. There was a poultry scheme initiated by the Local Native Council in the early forties but abandoned in 1945. It is probably due to the limited markets for eggs that the scheme, aiming to 'upgrade' chickens, was aborted. But, according to Oboler, it has much to do with the complete lack of regard for the issue of developing other cash sources other than maize and milk that would benefit women and men.

Throughout this period, women continued to plant independently patches of millet, adjacent to or as part of a vegetable garden (*kapungut*). After millet was replaced as food crop by maize, millet was used primarily in brewing beer. Millet production and beer brewing had traditionally been women's work. The beer industry came to be one of the profitable cash ventures that was primarily controlled by women. Another major avenue open to women to generate cash during this period was prostitution. Prostitution occurred traditionally in Nandi, as women who went into the lowlands to trade for grain were known to trade sexual favours for cattle.⁴⁵

5.2.4. The 1950s and the 'agrarian revolution'

The decade of the 1950s, however, was the period in which Nandi was suddenly and radically transformed. The Swynnerton Plan of 1954 brought, instead of the gradual changes during the preceding period, rapid and radical changes. The new nationwide agricultural policy provided for the allotment and tilling of individual plots in areas of high agricultural potential, such as Nandi district. The land tenure system changed profoundly. The pasture land, which had been held communally, was now divided and allocated to individuals. Land registration and demarcation of individual plot boundaries

took place in Nandi during 1954 and 1955. Another part of the programme was that alienated land in Kaimosi and Kipkaren valley was returned to the Reserves. This new land could be claimed by people from more crowded locations. Squatters on Uasin Gishu farms were also allowed to return to Nandi to make land claims. The return of stock was restricted, however, and related to the 'carrying capacity' of the land claimed.

Chiefs, headmen and Protestant church leaders, were those who benefitted most because they had already been involved since about 1947 in land enclosure. 46 Parcels of land allocated were of not less than 4 ha and in many areas averaged 8 ha. Persons who had already been permitted to enclose large tracts of land before the Swynnerton Plan became official policy were allowed to register these same tracts, which in many cases were larger than average holdings. And they were precisely those persons trying out innovations on a limited scale before this period. Land enclosure became so popular that measures to control it were deemed necessary.

Once plots were allocated, title holders were required to cull their herds in accordance with government determinations on the 'carrying capacity' of individual plots. This policy was accompanied by another unfolding policy which encouraged upgrading of indigenous cattle through artificial insemination with semen from Guernsey bulls. Ownership of pure-bred European dairy stock was still denied, however, to Africans until after 1960. This new attitude of the colonial administration towards cattle was well received by the Nandi.

In addition, in the late 1950s following the demarcation of individual plots, Africans were for the first time allowed to plant profitable cash crops. Tea, and coffee to a lesser extent, became a cash crop of tremendous importance for the Nandi. Today tea, is grown by almost every household in areas where its cultivation is authorized by the Kenya Tea Development Authority. In 1958 the number of Nandi growing tea was still less than 50. Tea production rapidly gained ground in the 1960s. Today, more than 5,000 small-scale producers grow tea.⁴⁷

All these changes had, however, far reaching implications. Land issues began to assume greater importance in district affairs and this in turn gave rise to a revival of the *orkoiyot's* position.⁴⁸ The new land tenure system was inconsistent with the social fabric and cohesion of the Nandi and it limited the ability of the Nandi to rotate crop and cattle over a wide area. All this gave rise to discontent and to severe economic inequalities. The number of discontented people was increased by the fact that the Nandi squatters, who had been dismissed from their jobs on European farms, returned to the district. The land shortage as a result of the privatization of pastures previously held communally, and the fragmentation of land, forced many to seek alternative means of livelihood, e.g., labour migration to a.o. Tanzania and Uganda.⁴⁹ Those who remained decided to consult *orkoiyot* Barserion, whose position was still influential, about what to do in the new situation. Barserion told them of a large tract of empty and fertile land on the Laikipia Plateau and advised to them leave Nandi district to settle there. A large group left in 1951 with livestock and other possessions, accompanied by Barserion. The group was intercepted before they reached Laikipia. Arrests were made and the livestock confiscated. Barserion managed to escape. Soon after that, Barserion called for a general rebellion which would drive out the settlers and the government. He

estimated that the British, occupied as they were with the Mau Mau rebellion and the Suez-crisis, would be ill-prepared to deal with an uprising in Laikipia. Before this could happen, he was arrested by the army and exiled to an island in Lake Victoria. As was the case in the Nandi Uprising in 1923, the basis resistance collapsed completely and almost immediately, without the leadership of the *orkoiyot*.⁵⁰

According to Oboler (1982), the change in the system of land tenure could only result in the widening of the *economic* gap between individuals with different access to resources. Though difference in wealth had already been emerging in the Reserve, private land tenureship was the turning point in the movement towards stratification. Inequality in the distribution of land gave rise to ever growing inequalities in the distribution of other resources, through credit. Preference was given to persons with more collateral. The larger the landholding, the larger the loan extended to a farmer and the more money was available to develop land and to increase the resources he controlled. Systematic advantages for large land owners, which after independence were also extended to medium sized farmers, widened the gap between large land owners and small land owners, between men and women and also between sparsely and densely populated ethnic groups and regions.⁵¹

In addition, the resources increasingly came to include non-agricultural property (lorries, trade enterprises, tractors, etc.). As these resources were almost completely controlled by the large farmers in the district, this in particular must have widened the gap between large and small land owners even more.

Land distribution figures for the year 1960 in Nandi district reveal that, when commodity production started to expand, land was quite unevenly distributed, as is the case in other districts in Kenya. The average holdingsize in Nandi, however, is large compared with other non-large-scale farming regions in Kenya. An agricultural census displayed the following figures on land distribution in Nandi:

Table 5.9. Land distribution in Nandi district (1960 survey)

0-1 ha.		1-2 ha.		2-3 ha.		3-4 ha.		4-6 ha.		6 and over	
%of all land	%of all hold	%of all land	%of all hold	%of all land	%of all hold	%of all land	%of all hold	%of all land	%of all hold	%of all land	%of all hold.
1.0	0.1	6.7	1.7	10.9	4.2	11.7	6.2	23.2	16.8	46.5	71.0

Source: Kitching (1980), op. cit., p. 332—

The expansion of commodity production, which Kenya as a whole experienced from the 1950s onwards, also took place in Nandi district. The ecological advantages of Nandi district for commodity production of maize, milk and tea, contributed to enrichment and affluence among the Nandi. In this process, however, because of traditionally low population density, the Nandi occupied a favourable position and this contributed to general Nandi affluence compared with other ethnic groups who settled in the southwestern part of the district (Luhya especially). Tensions inherent in the new economic situation

were beginning to make themselves felt. These tensions reflected the interests of smallholders versus larger scale landholders whose holdings continued to grow; of agricultural labourers versus large landholders who are employers of labour; Nandi landlords versus. Luhya workers/tenants.⁵²

Oboler (1982) stresses rightly that not only did the inequality between the large and middle size landowners and the smaller land holders increased significantly, as the large were favoured above the smaller. The inequalities based on gender, between men and women, increased considerably also. Land titles were given to men ignoring the traditional rights of women to land. Consequently, women's access to credit was cut off. Oboler argues that:

'if the Nandi as a group have been co-opted to the interests of Kenya's landed elite, Nandi women as an interest group have also been co-opted by the general affluence. Though Nandi's women's relative economic position vis-a-vis that of men has declined, in the midst of affluence it is hardly noticed.'⁵³

5.2.5. Expansion of commodity production since the 1960s

Unfortunately, detailed information to examine the socio-economic development patterns underlying commodity production in Nandi since the 1950s is not widely available. There is in particular, a lack of information for the period 1950 - 1971. There are only two economic case studies covering a limited number of farms in Nandi district available for the early 1960s.⁵⁴ The picture extracted from these case studies is that commercialization of maize and livestock production was taking on rapidly. Grading of cattle by artificial insemination and by buying in animals as well as disease control (dipping) were also increasingly taking place.

Maize production is still based on local varieties, although use of fertilizer and use of improved maize seed varieties (such as Kitale Synthetic II) is reported. Five out of the 14 farms covered by the farm enterprise survey held in 1963/64 planted improved seeds in combination with fertilizers. Eight of them still used local varieties; four of the eight applied fertilizers. Incorporation in the market for casual wage-labour and tractor hire service is already considerable. The tractor was used on nine farms to plough the land. Casual wage labour is primarily hired for weeding and harvesting. Two of the farms hired a permanent wage-labourer.

Roughly 51 % of total maize produced was marketed.⁵⁵ Only six of these farms commercialized maize production at that time. The yield of maize per ha. ranged from 6.4. bags to 24.4 bags. Commercialization of maize and milk was, however, mainly realized by the 'larger' farmer. The share of the four largest farms (i.e., larger than the average holding size in the 1963-64 survey) of gross revenue from sales of milk is 68.1 % and of maize 50.3 %. The share of the largest farm in the survey (42 ha.) was 39.8 % of total gross revenue from milk sales and 30.0 % of maize sales.⁵⁶

These surveys as well as other research, notably that of MacArthur (1964), hinted at another crucial aspect of the agricultural economy in Nandi district: the emergence of straddling. A number of the more 'successful' farmers in the survey, without exception those with above average holding sizes, invested spare capital in means of transport (lorries), farm implements (tractor) and

trade enterprises. According to MacArthur, 'all the "progressive farmers" enumerated had outside sources of income that doubled the family income.'⁵⁷

After 1969, information about economic development has been gathered systematically on an annual basis by the District Agricultural Officer. This information is published in the Annual Reports for Nandi district. On the basis of this information, we can produce a general overview of developments in agriculture from 1971 to 1987.⁵⁸ Furthermore, District Development Plans give some, but very little, information. Another source of information is the survey held during 1987. From the survey, crucial knowledge can be derived about the conditions of production prevailing that year (technologically and socially) for the Nandi agricultural population. We simply assume here that since the 1930s, and particular from the proclamation of the 'agrarian revolution' upto the early 1970s, economic development in Nandi district is continuously based on commoditization of agricultural production.

Based on the Annual Reports of the DAO, we shall examine the development of the agricultural economy of Nandi district. We shall do this by reviewing the increase in the commonly-grown agricultural commodities - maize, milk and tea - and by stating the role of state policy.

5.2.5.1 Maize production

Hybrid maize was introduced into Nandi district soon after the first varieties were released in the mid 1960s by the Kenya Seed Company (KSC). Evidence from our own survey suggests that the phase of adoption is over, which implies that the adoption rate is 100% in Nandi (see also Chapter 6, section 6.3.). From the survey we may also conclude that the process of adoption has a regionally differentiated picture. In some areas - the northern part of Nandi (Ndulele and Ndalat) and the middle part (Kipsigak) - it started in the mid 1960s; in others - the southern (Kapkangani) and more remote areas (Mosombor and Kibwareng) in the early 1970s. A major implication of hybridization of maize is that the traditional seed production and distribution systems were gradually, but in the end completely, dismantled. Soil fertility sustaining practices rely today almost completely on imported technology and inputs (fertilizers, top dressing). Production of maize is thus completely commoditized and determined by market forces. This implies that even production for the purpose of attaining self-sufficiency at the household level is founded upon the maintenance of commodity relations.

A crucial and definite step towards commoditization of maize was the establishment of the Maize Board in 1966 in the district and the establishment of agricultural extension services and formal credit systems encouraging the adoption of hybrid maize seeds and fertilizers.

The agricultural extension service is set up as the vehicle through which new technologies and new farm practices are introduced on the farm. Its goal is to advise all farmers how to grow hybrid maize. The extension service can, therefore, be considered as a crucial institution in the commoditization of maize production. Since 1982, extension is organized on the basis of the so-called Training and Visit system (T&V). The T&V system, or rather method, implies that a target farmer will be visited once every month by an extension officer. The average visit per officer is set at 8 per day. From this target farmer, a trickle-down effect is expected to spread the information to (30-50) neighbouring farmers. The target farmer is selected on the following criteria:

he or she must be a full-time farmer, must be respected, must be willing to innovate, must own an average-sized holding and must have a certain degree of literacy. It is expected that the agricultural extension service should finally reach all the farmers in the district through T&V method irrespective of holding size and racial background.⁵⁹

The DAO is very enthusiastic about the adoption of the Training & Visit extension system in 1982. The number of participating 'contact farmers' and the number of estimated 'follower farmers' is incremental. The reports mention 2,900 'contact farmers' (mainly maize farmers) for 1982 and 1,692 'followers' and for 1986, 4,123 'contact farmers and 25,707 'followers'. In addition, the extension service frequently organizes field days and hybrid maize trials in the district.

The provision of agricultural credit to the farming population is regarded by the state as an important ingredient of its policy to increase commodity production. The logic behind credit is that it can direct capital, which is not formed in smallholder agriculture, into the agricultural sector in such a way that productivity on the farm will be raised; the ultimate result will be an increase of production for the market.

The state clearly opted for a mixed structure for the credit system (see Chapter 3). It consists, therefore, of several private commercial banks (such as Standard, Kenya Commercial Bank) and a parastatal organization (AFC) which channels credit obtained through foreign aid into the agricultural sector. These institutions, the latter strongly controlled by the state by means of schemes (Seasonal Credit Schemes, Guaranteed Minimum Return (GMR)), and the former urged by the Central Bank of Kenya to direct at least 17% of their capital into agriculture, are the main suppliers of credit to farmers in Nandi district.

State-controlled agricultural credit schemes (the Guaranteed Minimum Return scheme, commercial IDA (=World Bank) loans, Fertilizer Import Support Schemes (FISS), Seasonal Credit Scheme (SCS), USAID-credit schemes) made capital available for Nandi farmers to raise yields and to expand maize production in the district. The DAO complained however in the 1977 report that 'small farmers were not benefitting from the AFC loans, but they will when IADP comes into being'.⁶⁰ The AFC administered the GMR loans. Farmers could obtain such a loan for extending or improving maize farming only when they owned a holding of at least six ha. Because of its bad repayment record the GMR scheme is generally regarded as a generous subsidy for the larger farmer in Kenya (see also Chapter 7). For that reason, GMR was abolished in 1979 and replaced by credit schemes more oriented towards smaller farmers. The commercial IDA (World Bank) loans were issued particularly to offer opportunities to finance tractor purchases. Between 1971 and 1976, forty-three farmers obtained a loan to purchase tractors. Mechanization of certain tasks on the farm is well developed in the district (see also Chapter 6). However, access to all these loans must have been limited to rich farmers only, since a 6 ha. holding was required (in case of the GMR loans) and 40 % of the tractor price had to be deposited in cash.

Since the 1960s the number of buying centres of the Maize Board (nowadays the NCPB) have increased substantially. In 1987, there were 106 buying centres in operation, while, in 1980, 34 centres were in operation; in 1981, 54 centres; and in 1987, 67. In addition to that, the supply of production

inputs improved considerably in 1972 when the KFA (now KGGCU, see Chapter 3) decided to erect a depot in Kapsabet. Before that time, farmers either had to go to Eldoret or get their inputs through middlemen and traders. Transport costs were considered as a hindrance for the expansion of hybrid maize production. Most of the time, the inputs are widely available, though not always (such as during 1983).

Table 5.10 displays information derived from District Annual Agricultural Reports about the increase in area under hybrid maize. The table mirrors clearly the commoditization trend in maize and the efforts of the national and district authorities to support the trend. It is also clear that the total yield is increasing as the area under hybrid maize is increasing as well as the use of new technologies (certified hybrid seed, fertilizers, ploughs, tractors).

Table 5.10 Area under hybrid and local maize (ha) in Nandi district 1971-1987, estimated total maize yield purchases by NCPB (kg) and reported fertilizer use

Year	Hybrid maize area	Local maize area	Total yield	NCPB purchases	Use fertilizer
1971	22,179	10,298	n a	n a	n a
1972	23,372	4,673	n a	336,967	364,577
1973	23,75	93,632	n a	293,750	n a
1974	25,900	3,500	983,500	296,581	239,592
1975	41,095	n a	1,638,960	n a	n a
1976*	43,012	n a	1,402,160	442,255	964,650
1977	49,475	n a	1,870,506	n a	654,650
1978*	51,974	n a	1,838,466	n a	753,800
1979	n a	n a	n a	n a	n a
1980*	59,239	n a	2,100,000	224,000	n a
1981	162,977	n a	2,204,195	426,033	n a
1982*	60,578	n a	2,120,230	551,775	n a
1983*	59,496	n a	2,082,577	524,004	n a
1984*	62,000	n a	1,984,000	388,235	n a
1985	62,744	n a	2,197,090	369,770	n a
1986	77,409	n a	2,709,31	1632,348	n a
1987	78,000	n a	n a	674,464	n a

* these years were marked as bad years for maize cultivation. Drought (1976, 1980), too much rain (1982) or came too early (1978), 1976 and 1983 were marked as bad years because of input price rises (1976) and marketing and input supply was badly organized.

Source: Ministry of Agriculture, Nandi District, Annual Reports, 1972-1986, the data for NCPB maize purchases for the years 1980/81 -1986/87 are from NCPB Kapsabet.

5.2.5.2. Livestock and milk

The commercialization of milk was until the mid 1980s, primarily spurred by the Kenya Cooperative Creameries plant in Eldoret. Commercialization of milk was, therefore, basically confined to the northern region of Nandi. Marketing problems, bad conditions of roads and high transport costs to Eldoret hampered dairy development in the southern regions of Nandi district. The building of two KCC plants, in Kapsabet and Lessos in 1985,

changed that situation dramatically.⁶¹ Lower transport costs and better marketing opportunities contributed to a considerable increase in milk production. Smallholder milk is marketed by 18 cooperative societies (in 1987), while the large farmers (numbering 3,200 in 1987) are able to deliver milk directly to milk the factory. From DAO-reports - confirmed by data from KCC-Kapsabet - it is clear that the intake of milk by the KCC plants in Eldoret, Kapsabet and Lessos is steadily increasing (see Table 5.11). At the same time, dairy development schemes, which from the mid 1930s always have been a major part of district development plans, provided supportive measures upon which milk production could expand.

Table 5.11. The expansion of marketed milk in Nandi district, 1972-1987

Year	Marketed milk (kg)	
1972	1,892,638	
1973	7,904,201	
1974	7,110,338	
1975	4,035,951	
1976	3,452,852	(bad year)
1977	7,140,947	
1978	3,767,301	
1979	n.a.	
1980	n.a.	
1981	6,458,068	
1982	5,898,516	
1983	6,442,822	
1984	4,379,005	(bad year)
1985	5,302,409	4,277,612 Kapsabet plant only (July-December 1985)
1986	6,400,000	9,893,022 Kapsabet plant only
1987	?	9,598,508 Kapsabet plant only (January-September 1987)

Source: Ministry of Agriculture, Nandi District, Annual Reports, 1972-1986; the data for Kapsabet plant 1985-1987 are from KCC-Kapsabet. The intake of the Lessos plant is unknown.

The table reflects only a part of the commercialization of milk in Nandi district. There is probably more milk marketed as well as produced than that of which the DAO is aware of. The intake of milk by the Kapsabet plant is considerably higher than the DAO stated in his annual reports. The 1987 survey indicated that the smallholder 'morning milk' is marketed through the cooperative societies; a small proportion is marketed locally; the 'evening milk' is generally consumed by the household itself.

The livestock extension and veterinary services to the farmer have continually intensified since livestock development was launched in the mid 1930s. The objective of the livestock development programme is to reduce the zebu cattle to a very minimum. Zero-grazing⁶² is today widely recommended by the department, in particular for the small-scale farmer. Many farmers have already entered, or are gradually moving towards, zero grazing. Grading of cattle is increasing due to purchase of graded dairy cows and by artificial insemination and the use of graded bulls. Commercial IDA loans were issued, particularly in the early 1970s, to provide the capital to purchase graded dairy

cattle, pasture development, napier grass planting, fencing and dairy equipment. A title deed to the land served as collateral for that loan. Fencing of pastures is increasing at high speed. Table 5.12 shows the development of the cattle population in the district.

Table 5.12. Development of livestock in Nandi district

Year	Graded dairy cows	Zebu	Crosses	Sheep	Goats
1972	44,195	161,418	n.a.	53,797	45,776
1973	n.a.	n.a.	n.a.	n.a.	n.a.
1974	29,050	290,315	n.a.	54,600	46,900
1975	n.a.	n.a.	n.a.	n.a.	n.a.
1976	50,306	206,639	n.a.	46,342	46,550
1977	49,615	280,734	n.a.	46,000	46,200
1978	47,650	291,735	n.a.	45,000	45,800
1979	n.a.	n.a.	n.a.	n.a.	n.a.
1980	n.a.	n.a.	n.a.	n.a.	n.a.
1981	48,810	88,400	173,931	22,460	14,600
1982	65,490	78,700	175,340	23,383	14,971
1983	70,064	70,522	179,743	46,963	24,404
1984	68,505	73,439	180,370	30,045	26,540
1985	69,175	74,438	185,781	30,295	27,250
1986	152,665	30,140	126,888	n.a.	n.a.

Source: Ministry of Agriculture, Nandi District, Annual Reports, 1972-1986.

At the same time, the number of private and government-built (mostly in cooperation with foreign aid agencies) cattle dips is increasing. In 1972, there were 93 dips in the district, slowly increasing to 117 operational dips in 1977. In 1986, 306 cattle dips were operational in the district. Furthermore, the annual DAO reports reveal clearly the selling of Nandi zebu cattle and sheep and goats to the Kenya Meat Commission for slaughter. The same hold true for the commercialization of hides and skins.

5.2.5.3. Tea cultivation

Table 5.13 shows the expansion of tea production for Nandi district. Tea appears to be a suitable crop for Nandi's agro-ecological zones. The number of tea growers has increased since the 1960s. Today, approximately 9,400 ha. is under tea. 1,869.8 ha. was cultivated by approx. 5,000 small-scale farmers in 1986. It is estimated that they obtain an average yield 1,300 kg of green leaf tea per ha./p.a. A few foreign-owned large tea estates (in total 7,500 ha.) still operate in Nandi district. The yields on these plantations is approximated at roughly 8,000 kg of green leaves per ha. per annum.⁶³ Marketing of tea is handled by KTDA which is also responsible for supervising smallholder tea production in the district. A tea factory (named Chebut), established in 1972 in Kapsabet, processes (by drying) the green leaf tea from the district and from the neighbouring district Kakamega. Previously, green tea leaves were sold to private tea factories at Nandi Hills and Kaimosi tea plantations. Recently, the government of Kenya started to expand tea production in Nandi within the framework of the 'Nyayo Tea Zones'. The acreage of 'Nyayo tea' will increase

in the coming years. It will occur, however, at the expense of the Nandi Forest, one of the few remaining natural forests in Kenya. The 'Nyayo tea' belt totalled 97.6 ha. in 1986.

Table 5.13. Green tea leaf production in Nandi district, 1975-1987 (kg), smallholder tea area and number of smallholders

Year	Production	Tea hectareage	Number of producers
1971	1,118,500.0	n.a.	n.a.
1972	1,652,250.0	n.a.	n.a.
1973	1,335,397.5	n.a.	3,889
1974	1,299,008.0	n.a.	n.a.
1975	1,149,980.0	n.a.	n.a.
1976	1,075,041.5	1,364.7	4,102
1977	1,716,021.0	1,365.5	4,227
1978	2,223,050.5	1,414.6	n.a.
1979	2,352,103.5	n.a.	n.a.
1980	1,937,004.5	n.a.	n.a.
1981	1,933,238.0	1,567.8	4,760
1982	1,969,013.5	1,655.7	4,864
1983	2,408,492.0	n.a.	n.a.
1984	2,443,339.0	n.a.	n.a.
1985	3,265,642.0	1,815.6	n.a.
1986	3,068,049.0	1,869.8	approx. 5,000

Source: Ministry of Agriculture, Nandi District, Annual Reports, 1972-1986 and KTDA, Nandi district.

5.2.5.4. Other crops

Other cash crops in the district are coffee, pyrethrum, sugar cane, wattle, bananas and vegetables. The expansion of coffee and pyrethrum production is not impressive. Both crops were introduced in the 1950s. Coffee and pyrethrum production is hampered by marketing and storage problems as well as the fact that the capital needed for expansion is lacking. Several coffee- and pyrethrum farms are not well kept by the owners. The area under pyrethrum (mainly in the eastern region) is constantly declining; the crop is increasingly replaced by food crops. The area under coffee (mainly restricted to Aldai division and Songhor) has slowly expanded from 69.1 ha. in 1972 to 441 ha. in 1986. Coffee, produced by smallholders in Aldai division and by large scale farmers in Songhor, suffers, according to the DAO, from 2 major problems. On the one hand, fertilizer application and pest and disease control are poor due to financial constraints. On the other hand, the coffee marketing agency appears to have a bad record for delayed payments to farmers. The three coffee factories in the district are underutilized as a result of the slow development of coffee production. More coffee needs to be planted in the district in order to overcome this situation. A specific coffee credit schemes has been set up in order to encourage more farmers to plant coffee. The Farmers' Trading Centre in Kaimosi established a coffee seedling nursery in the early 1980s. Since that time, coffee production is recovering; at least the area under coffee is expanding again. The area under coffee again reached its 1974 level in

1985. The large-scale coffee farms are in bad condition. The owners lack the essential capital to upgrade the former European-owned coffee farms.

The development record of sugar cane and wattle is likewise not outstanding. The expansion of sugar cane is hampered by the marketing inefficiency of the Chemilil Sugar Company, the bad condition of roads and the lack of transport for smallholders. The area devoted to wattle is unknown but output has been declining since 1971. The DAO noted that farmers showed no interest in this commodity. After 1978, there is no information available for wattle. Sunflower is another crop recommended for Nandi district. The information on sunflower is rather scattered in the reports.

Table 5.14. Development of beans production in Nandi district

Year	Area ha.	Estimated production (bgs)	Purchase by NCPB (bgs)
1976	620	4,000	n.a.
1977	778	6,227	n.a.
1978	850	4,754	108
1981	1,956	10,000	2,734
1982	3,405	n.a.	1,577
1983	2,633	2,370	110
1984	2,870	2,58	317*
1985	4,700	5,076	452
1986	5,245	5,664	3,697

* the NCPB stopped purchasing beans during that year.

Source: Ministry of Agriculture, Nandi District, Annual Reports, 1972-1986.

Next to the staple food crop maize, production of beans is expanding significantly (see Table 5.14). Beans are primarily produced for home consumption, although the quantities marketed by the NCPB are increasing. A considerable proportion is marketed locally through informal marketing channels. It is estimated that approx. 20 % of total bean production is sold. The hectareage under beans is expanding, and it has become a widely grown crop in the southern region (in Kapkangani and Kibwareng sub-locations). Beans are not widely grown in the northern region; beans were considered a 'poor men's crop' there. Beans are a long neglected crop. The agricultural department views beans as an important protein rich, nutritious and, above all, cheap food crop. The bean seeds are, in many cases, not bought at the market but retained from a previous harvest. In addition, beans do not require fertilizer and when intercropped with maize, the yield of maize will be higher. For these reasons, bean production is receiving increasing attention from the district authorities.

5.3. Conclusion

The review of trends in commodity production in Nandi indicates clearly the crucial role played by the state in fostering commoditization of the agricultural economy. Before the proclamation of the 'agrarian revolution' in the early 1950s, the Nandi clearly adopted a market oriented farming strategy. When the 'agrarian revolution' was effectuated and the state intervened in the conditions of agricultural production, commodity production in Nandi district

became progressively founded upon a trend towards capitalization and commercialization of production. State intervention involved state/public investment in the establishment of a technological and administrative framework in the country as a whole and in Nandi district. As a consequence of state investment, new opportunities for the Nandi peasantry became available: improved (synthetic and later on hybrid) seeds, fertilizers, machines, agricultural credit, extension- and tractor hire services and marketing facilities. The subsequent integration of these options into their farming strategies meant that new forms of commodity production emerged in Nandi district. Land was privatized and the distribution of land was subsequently regulated by market forces. Commencing in the late 1950s and early 1960s, commodity production became based on improved maize seed varieties which were available at that time, improved husbandry practices and investment in graded cattle. At the same time we see a gradual adoption of new and higher value crops (tea and coffee, pyrethrum, sugar cane), although these crops do not rival with maize and dairy products.

The review also indicated that there were Nandi farmers, portrayed by Kitching, as having the potential (good agricultural land) but lacking the essential means (capital) (see Chapter 4, section 4.5), gradually gained access to the means of capitalizing production. This resulted in a dramatic increase in production for the market. The means of capitalizing production came from three sources. The most important source was capital obtained by incorporation into the agricultural credit market and invested in agriculture, graded livestock, fencing and implements. It may be assumed that money (or capital) earned from sales of agricultural products and money (or capital) obtained from off-farm economic activities (wage labour, hiring out implements and trading) were the two other sources. A large part of that money must have been re-invested in agricultural production by a large number of farmers since the number of farmers who actually gained access to credit was rather small. Moreover, results from the limited survey held during 1963/64 suggest that the agricultural and non-agricultural resources were largely controlled by the larger farmer commodity production (of maize and milk) was primarily carried on by the large farm enterprises, and the more profitable involvement in off-farm ventures fell largely into the hands of the large farmer in the district. If this continues to be so, it would imply that commodity production could lead to enrichment of the wealthy and middle peasant strata and to impoverishment of those with fewer resources.

Notes

¹ See Jaetzhold & Schmidt, *Farm Management Handbooks* (1982), Vol. II, p. 37

² District Development Plan, 1979-1988 p. 9

³ *Ibid.* p. 5

⁴ See *Farm Management Handbooks* (1982), Vol. II

⁵ According to Walter (1981), p. 13, the Nandi did not exist on Mount Elgon as a separate group having a unique identity and name. Oral history revealed that a small group of people left Mount Elgon and, slowly moved south southwest, travelling until they reached Lake Victoria. At this juncture they turned east and moving along the lake coast through a forest (Kakamega and Nandi forests), reached an upland surface behind an escarpment (Nandi escarpment). At this place, they settled and eventually chose a name which identified them as a distinct group. See also Huntingford (1953).

⁶ This section is primarily based on Walter (1981)

- 7 Ibid, pp 23, 24
- 8 Matson, A. (1972), Nandi Resistance to British Rule, 1890-1906, Nairobi, East African Publishing House, 1972, pp. 28-29, quoted in Oboler (1982), p. 60
- 9 Walter (1981), pp 24-29, and Huntingford (1953), chapter I-IV
- 10 Huntingford (1953), p. 45
- 11 Ibid, p. 46
- 12 See Oboler (1982), p. 61 ff
- 13 Oboler (1982), pp. 10-13
- 14 See also Sorrenson (1968), pp. 21, 22, 214
- 15 See Ellis (1976), p. 558, footnote 19
- 16 Ibid, p. 558
- 17 Huxley (1957), p. 62
- 18 Ibid, p. 62
- 19 See also Youé (1987), pp. 396, 397
- 20 See Matson (1972), p. 19
- 21 Youé (1987), p. 400
- 22 Oboler (1982), p. 10
- 23 See also Ellis (1976), pp. 561, ff, and Oboler (1982), pp. 236, ff
- 24 Youé (1987), p. 401
- 25 Ellis (1976), p. 561
- 26 The analysis of the 'Nandi Uprising' is primarily based on Ellis (1976), pp. 563-574
- 27 See also Van Zwanenburg (1975), p. 94
- 28 Youé (1987), pp. 401, 402
- 29 See also Furedi (1976), pp. 186, ff
- 30 Arap Magut (1969), p. 105 For a portrait of Harry Thuku and his role in the Kikuyu protests in 1922, see also Kitching (1980)
- 31 Kitching (1980) p. 100
- 32 Youé (1987), p. 400
- 33 Oboler (1982), p. 257
- 34 Ibid, pp. 243, 244
- 35 Youé (1987), p. 403
- 36 Ibid, pp. 415, 416
- 37 Clayton & Savage (1974), p. 308 and Matson (1972), p. 22
- 38 See Oboler (1982), pp. 244-250
- 39 Ibid, p. 254 and Nyonyintono (1982), pp. 57, 58
- 40 Kitching (1980), p. 98
- 41 Ibid, pp. 99, 100
- 42 Ibid, p. 146
- 43 Ibid, p. 147
- 44 Oboler (1982), pp. 257, 258
- 45 Ibid, pp. 258-262
- 46 Arap Magut (1969), p. 106 and Matson (1972), p. 39
- 47 The data are from KTDA, Nandi district office, see also section 5.2.5.3
- 48 See Oboler (1982), pp. 256, 257 and Matson (1972), p. 39
- 49 See also Nyonyintono (1982), p. 59
- 50 See Arap Magut (1969), pp. 106, 107 and also Matson (1972) Barsenon was released from detention in 1961 at the same time as Kenyatta. He settled down in Nandi Hills where he owned a large farm, in the meantime preferring to forget the past
- 51 See Oboler (1982), pp. 266-268 and Matson (1972), p. 39
- 52 See Oboler (1982), pp. 266-268 During 1981, racial tensions between Nandi and Luhya immigrants came to a head again. In Kapkangani sub-location, in particular a lot of property belonging to Luhya was destroyed by Nandi protesters. The land issue - the Nandi regard the southwestern part of the district as traditional Nandi territory - was probably the reason behind these racial tensions
- 53 Oboler (1982), p. 268
- 54 Republic of Kenya (1964, 1965)
- 55 MacArthur (1964) estimated the overall degree of commercialization (of maize, milk and other cash crops) at 63 %, quoted in Cleave (1974), p. 20
- 56 Information derived and calculated from Republic of Kenya (1965)

- 57 MacArthur quoted in Cleave (1974), p. 17. See also Matson (1972), p. 39.
- 58 Unfortunately, the reports for the period 1969, 1970 and 1972 were untraceable, either in the MOALD department in Kapsabet, or in the library of MOALD-headquarters in Nairobi.
- 59 Interview extension service department Kapsabet, October 1987.
- 60 1977-Annual Report, Nandi District, p. 35.
- 61 These two plants only cater for intake and the first heating of milk. The milk is then transported to the Eldoret plant for further processing.
- 62 Zero-grazing is a livestock management system by which the farmer grows napier as fodder in combination with destocking and upgrading of dairy cows. See also Chapter 6.
- 63 Farm Management Handbooks (1982) vol. II, p. 41.

CHAPTER 6.

COMMODITIZATION AND HETEROGENEITY IN NANDI DISTRICT: RESULTS OF A FARM SURVEY

Introduction

In this chapter we shall examine the contemporary socio-economic trends underlying the continuing process of commoditization in Nandi district. Particular attention will be paid to who, or what kind of peasant household, is participating in commodity production and under what kind of conditions, technological as well as social, under which commodity production is being carried out. The data for the analysis emanate from a survey undertaken in the second part of 1987. A methodological explanation of the survey and details of the actual survey will be given in Appendix I.

The survey was undertaken at the farm level during August, September and October of 1987. Two sample criteria were employed enabling us to draw a stratified sample according to holding sizes and their location in Nandi's agro-ecological zones. Employing both criteria, a representative stratified sample was obtained comprising 90 farm enterprises and households. We defined a *household* as the persons who were working and living, and eating together everyday. Family members working in other parts of Kenya and living away were not included as members of the household and their income was only included in as far as they sent money to contribute to the welfare of the household.¹ The first sample criterion, holding size, was based on data gathered from the land registration files of the Ministry of Lands and Settlement in Kapsabet. This department registers plot sizes and numbers, plot holders and time of purchase, selling and/or subdivision. The second criterion for the sample rests upon the existing ecological variation in the district. This criterion was employed in order to highlight the natural, climatological conditions for agricultural production. For this purpose, six sub-locations were selected according to their location in Nandi's agro-ecological zones (see also Chapter 5 section 5.1 and map 2). The Department of Agriculture, Kapsabet, assisted in this selection procedure.

The questionnaire was built up to gather empirical data to assess the socio-economic nature of development in the district and to assess the degree of commoditization in the district. These issues were covered by questions about the productive and consumptive reproduction patterns of the farming community and their farm enterprises. A second major objective of the questionnaire was to gain information on aspects of state intervention and distribution of state services in the district.

A review of the data discloses two important characteristics of the agrarian structure in Nandi district. *In the first place*, the data support the trend towards commoditization of agricultural production examined in Chapter 5. The development of commodity production and commodity relations is widespread and deeply rooted. The market is an important conditioning factor for farming in the district. Not only production inputs but also labour

increasingly appear in the production process as commodities, and the consumption of individual households is partly satisfied through the maintenance of commodity relations.

In the second place, the data demonstrate that the farming strategies of the agricultural population vary greatly. This is apparent on two levels. The farming population exhibits, on the one hand, differential degrees of commoditization. One household tries carefully to balance its farming strategy of maintaining non-commodity relations to regulate production and reproduction while keeping the mobilization of resources via commodity relations at a minimum. Another household acquires virtually all resources (labour, physical inputs, implements) through commodity relations. Between these two extremes we can distinguish many different strategies. The same holds true for reproduction of the households. There exist varying degrees of incorporation into the market to satisfy consumption needs. On the other hand, reproduction of the household and the farm enterprise is not merely based on agricultural production. The population clearly diversified their economic strategies: straddling agricultural production and off-farm work. The reasons for straddling vary widely, however. The agricultural economy of Nandi district is thus founded neither upon a fully-fledged circulation of commodities, nor on agricultural production only.

Although I am fully aware of the dialectic relationship between the reproduction of relations of production and farming strategies, I limit myself here to one side of the equation: the determination of social relations of production on farming strategies.

The variation in farming strategies can be ascribed to an extremely large differentiation of the socio-economic preconditions for commodity production. Resources such as land and implements are unevenly distributed. In addition, the state institutions maintain differing linkages with the farming population in the district. The degree of incorporation into the market for capital and services differs considerably, thereby reinforcing the unequal transmission of the benefits of commoditization. The almost logical outcome is that the level of reproduction of farm and household differs widely. The farming population in Nandi district cannot therefore be regarded as a homogeneous group of producers, neither can their farming strategies be regarded as homogeneous.

The different farming strategies correlate closely in their turn with various styles of farming. Maize farming in particular is organized in different ways with different techniques. Particularly in agriculture, we can seldom distinguish one single labour process. Several combinations of implements of labour can be distinguished in the fields. The technological level of the farm enterprises in the sample varies widely, therefore. This technological difference, in its turn, is mirrored in the extremely large variation in the intensity of farming. Productivity of land and labour also exhibits an enormous variation (see Table 5.6 of Chapter 5 on the variation in maize yields). Apart from the obvious explanation of the ecological diversity in the district, the variation in yields can also be attributed to technological and organizational factors.

There is only one crucial factor which is common to the farming population as a whole in Nandi district: the operation of the market. The farming population is on the one hand firmly integrated into the market for physical production inputs, particularly for maize production. On the other hand, the

market for inputs and output operates in the same way for each household or peasant stratum prices are the same and each household, whether large or small, poor or rich is faced with the same peculiarities of the market. For all the households, and on all farms, the labour process for maize farming is governed by the same prescription or technology code of hybrid maize production (as emphasized earlier in Chapter 1). This does not mean, however, that all households cope with the logic and peculiarities of the market in the same level and on the same way. As we shall see later on, the prescriptions for hybrid maize farming are resolved in the fields in different ways.

In the following we shall first elaborate on the socio-economic characteristics of the agricultural economy and examine the different preconditions of each household for farming (land, labour and implements) and the extent of market incorporation. For these reasons, the survey was built up around issues such as *'who are these farmers, how do they farm, and what do their holdings look like, what kind of relations do they have with the market and the institutional framework in the district, what do they earn from farming and do they have other sources of income?'* By answering these questions we may assess the effect of the operation of market forces for agricultural production on socio-economic development in the district, and how these effects constrain or open up choices of farmers.

This examination leads us automatically to the issue raised in previous chapters: the question of social differentiation of the farming population in rural Kenya. This question is two-sided. *In the first place*, is the family farm or household commodity production the predominant form of production, is differentiation taking place within the household commodity producing strata (enrichment and/or impoverishment) and is capitalist production emerging in Nandi district? It may be argued that social differentiation is partly reproduced by differential commoditization and partly through different strata being linked to each other in the process of commoditization. Or to phrase the question differently, what is the socio-economic dynamic of commodity production in Nandi district? *In the second place*, is there a close relationship between farming strategies, social differentiation and the application of agricultural technology in maize production? The data gathered permitted a quantitative analysis enabling us to 'measure' the relevance and impact on yields of the 'place' people occupy in the set of social relations of production in the countryside.

Both aspects of the question of rural differentiation are outlined in this chapter. In order to get a good picture of social and economic developments we chose to present the relevant data at holding size level. When necessary, we shall point out the differences between the sub-locations (i.e., here treated as AEZ) in the district.

6.1. Ownership and distribution of means of production: land

Land is a crucial precondition for agricultural production. The survey gave a good impression of the distribution of land ownership in Nandi district and in the sub-locations. The selection method employed implies, however, that one category of households is not present in the survey: landless people or households. According to several studies, the phenomenon of landlessness is increasing in Kenya (see Chapter 4). The evidence of landlessness from Nandi

Table 6.1. Size distribution of land in the sub-locations in the sample

Holding size (ha.)	Kap Kangani no of h.h. %	Kibwareng no of h.h. %	Kipsigak no of h.h. %	Mosombor no of h.h. %	Ndalat no of h.h. %	Ndulele no of h.h. %	total no of h.h. %
0-1	5 17.2	0 0.0	1 6.2	0 0.0	0 0.0	0 0.0	6 6.7
1-2	6 20.7	2 22.2	2 12.5	4 36.4	1 10.0	0 0.0	15 16.7
2-3	9 31.0	1 11.1	2 12.5	1 9.1	0 0.0	0 0.0	13 14.4
3-4	3 10.3	1 11.1	0 0.0	3 27.3	1 10.0	1 6.6	9 10.0
4-5	2 6.9	1 11.1	1 6.2	0 0.0	0 0.0	3 20.0	7 7.8
5-	4 13.8	4 44.4	10 62.5	3 27.3	8 80.0	11 73.3	40 44.4
total	29 99.9	9 99.9	16 99.9	11 100.1	10 100.0	15 99.9	90 100.0

Source: Own survey (plots owned and cultivated outside sample sub-locations are excluded).

district is not well documented. The *District Development Plan 1979-1983* only mentions of 400 persons as being landless at the beginning of the plan period. The policy document did not point out how, and in which economic sector, they were earning a living. It is clear, however, that as they own no land, the only reproduction opportunity the landless households have is to sell their labour power on a regular bases.

Private ownership is the only type of ownership in the district and is the result of colonial and post-colonial policies towards land (see Chapters 3,4 and 5). The current trend in distribution of ownership of land is partly a reflection of the accumulation of land by ancestors - 42 % of the households in the sample obtained access to land through inheritance - and partly the result of the operation of the land market - 58% of the sample households gained access to land through purchase. The survey established that this is especially the case in Kapkangani sub-location where in the last two decades (roughly since the late 1960s) at least 90% of the land has been transferred from Nandi to Luhya ownership. In Ndulele and Ndalat sub-locations significantly fewer land transfers took place, though this does not mean that a land market is absent or that distribution of land is solely the result of past accumulation patterns.

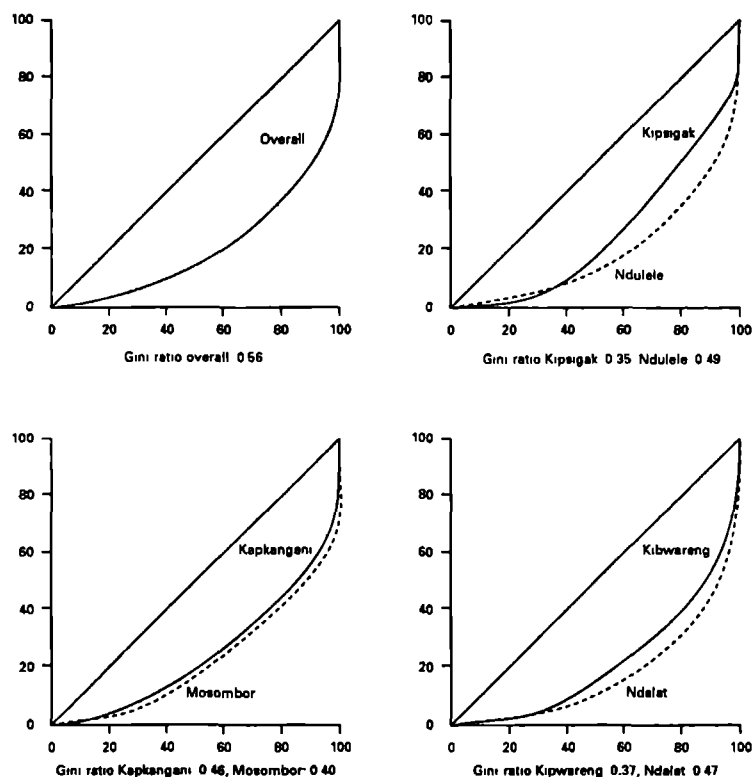
The incidence of land rental is almost absent in the district, contrary to other districts and provinces such as Nyanza and Western Province.² Only two households in the sample rented land for cultivating maize in addition to their own holdings. Furthermore, only one household in the sample reported hiring out of land, and in this case, half of the holding. The absence of land rental implies that owner-tenant relations do not feature in the process of social differentiation in Nandi district.

Table 6.1 shows the distribution of land in the sample. Figure 6.1 displays the Lorentz curve for the distribution of land in the sample sub-locations. The Table discloses a rather unequal distribution of land in Kapkangani, Ndalat and Ndulele (i.e., a high Gini-ratio) compared with the other sub-locations.

Ownership of land, as one of the most important preconditions for commodity production, varies widely among the farming population in the district.

Land use in the sample area has already been discussed at the beginning of the previous chapter (see Tables 5.4 and 5.5, Chapter 5).

Figure 6.1. The Lorentz curve for distribution of land in Nandi district



6.2. Mobilization of labour for maize farming

Two major forms of labour can be distinguished in the area: on the one hand, non-commoditized labour from the household itself and exchange labour mobilized through different relations, and, on the other hand, commoditized labour, i.e. wage labour. The survey covered mainly the mobilization of labour for maize production, while the labour input in dairy farming was not recorded. It is accurate, however, to assume that for dairy farming the wage-labour market plays a less important role than in maize farming. Labour in

dairy farming on the smallholder farm is mainly undertaken by non-paid household labour for milking, grazing and dipping. The size of the herd can be used as a yardstick: the larger the herd, the larger the share of wage-labour. Labour mobilized for production of other crops (beans, vegetables, fruits) is, as the survey revealed, primarily household labour. The fact that some of this produce is marketed has no relevance. The households producing tea and coffee hire wage labour, but mainly for harvesting. With respect to maize farming only, the following observations can be made.

In the case of family labour³, the cultivator/owner and members of his/her household work on family land. Non-paid family labour, widely available on the farm, is an important non-commoditized element in the production and reproduction of farm and family. Family labour is of particular relevance for the small or poor peasant household. Exchange labour too is non-paid labour. Family labour is reciprocally exchanged between different households or units of production. It is the labour type of the least importance in the district. Since it is rather rare - 8.2 % of total labour input on the farm is exchange labour - and since it is basically family labour which is exchanged, it has been treated as equivalent to such labour. Generally, household and exchange labour is more widely employed on small and middle sized holding, than on the larger holdings (see Table 6.2). Furthermore, household and exchange labour is basically *manual* labour. Table 6.2 shows the extent of use of hired labour on the farm by holding size for the identified farming activities. The wage-labour ratio, calculated by dividing wage-labour input by total labour input, represents the degree of commoditization of labour.

Table 6.2. Mean wage-labour ratio and percentage of households not hiring wage-labour, by holding size (N=90)

Holding size	Wage-labour ratio (%)	Households not hiring wage-labour (%)
0-1	0.7	83.3
1-2	23.4	42.8
2-3	24.6	23.0
3-4	13.8	35.6
4-5	26.5	28.6
5-5	4.4	5.0
Overall	35.3	27.8

Source: own survey

Wage labour is not merely hired for one farm task only. It is employed differentially on the farm: for land preparation (i.e. hiring a tractor with a wage-labourer in case of mechanized ploughing or people for digging), sowing/fertilizing purposes (manual or mechanical), weeding and harvesting. The households employing an oxen plough rely on the application of family labour only. In case of manual wage-labour, a six hour labour day is rewarded by Ksh 10 per day and a nine hour working day by Ksh 15. In some cases of manual labour the price is calculated on the basis a price per acre (i.e. piece work). Tractor hire prices are mostly on the basis of the acreage of land to be ploughed (the average price is Ksh 200 per acre). The same applies to the

hiring of planters. Furthermore, wage labour is primarily on the basis of casual or seasonal employment. Some large farmers (9 % in the sample) employed wage labour on a permanent basis.

Table 6.2. shows that the larger farms are the dominant users of agricultural wage-labour and that the smallholdings primarily rely on household labour. Incorporation into the agricultural wage-labour market is fairly high in Nandi district, although family and exchange labour remain important non-commoditized elements in the reproduction of the farm enterprise and household. Wage labour measured in terms of number of labourers employed represents 35 % of total labour input. This situation means, that in Nandi district as a whole, wage labour (but not necessarily free labour) is available for either permanent or casual/seasonal employment. Seventy-two percent of the households are hirers of wage labour for one or more farm tasks. This leaves only 28 % of the households solely depending on family and exchange labour. Wage labour in the form of tractor hire is the most common form of wage labour. Sixty-two percent of the households in the sample hire a tractor plus worker/driver in order to prepare the land for sowing (see Tables 6.3 and 6.4).

6.3. Ownership and distribution of means of production: implements for maize farming

The ownership of jembes (for land preparation, sowing and weeding) is well distributed among the agricultural population. A minority (i.e., 16 % of the households) own an ox plough. The majority of the households do not own, but hire, a tractor or planter. Only 9 % of the households own a tractor, and 8 % own a planter. Tractors and planters are also used for hiring-out purposes and earn a considerable amount of cash for the owner. The survey indicates that the smaller farms mainly rely on manual (mainly household) labour⁴, while on the larger holdings the use of tractors and planting machines is high, and much more labour is hired to perform the time-consuming farming activities (ploughing, sowing/fertilizing, harvesting and weeding in particular). Jembes cannot be considered as implements which can be monopolized by a certain peasant stratum, while tractors and planters are subject to monopolization.⁵

6.4. Labour processes and farming styles in the sample area: cultivation techniques and farming intensity

An agricultural labour process embodies the following elements: the *instruments of labour* (tools or implements: jembe, tractor, ox plough, planting machine, etc.): the *objects of labour* (seeds, fertilizer, pesticides) and the *labour force* (household- and exchange labour, wage labour and mechanized labour). It is typical for agricultural production that one single labour process can seldom be distinguished. Several combinations of the elements of the labour process are possible, in theory as well as in the fields. In the sample area we found twenty-three different labour processes in maize cultivation. They were rank ordered in Table 6.3 according to the level of 'sophistication' or 'modernization' in order to show the structural trend in maize farming in Nandi district: the more sophisticated the labour process, the more implements and labour are mobilized through market relations. Implements

(hoes, tractors, planters), tractor hire service and labour appear increasingly as commodities in the production process of maize.

Of these labour processes nine types are, in accordance with their frequency of appearance in the sample area, of relevance for further explanation. These types are 4, 5, 8, 11, 12, 13, 15, 17 and 20. These are marked with + and discussed in more detail below. The remaining types are comparable with at least one of the relevant types. The Table would be more complex if we included the different forms of labour employed in maize production.

Table 6.3 Variation in the labour process of maize growing in the sample area. (N=89, 1 non response)

Type	Mean maize plot (ha)	P1	P2	P3	S1	S2	D	W1	W2	W3	crop index	Nu h.h	%
1	1.0	*			*		*		*		1	2	2.2
2	1.0	*			*				*		1	3	3.3
3	1.4	*			*				*		2	2	2.2
4+	0.6	*			*				*		2	12	13.3
5+	1.0		*		*			*			1	4	4.4
6	0.9		*		*			*			2	3	3.3
7	0.4		*		*		*		*		1	1	1.1
8+	1.0		*		*				*		1	4	4.4
9	1.6		*		*				*		2	2	2.2
10	1.5			*	*		*	*			1	2	2.2
11+	1.0			*	*			*			1	9	10.0
12+	1.6			*	*			*			2	5	5.6
13+	2.3			*	*				*		1	14	15.6
14	1.8			*	*		*		*		2	2	2.2
15+	1.5			*	*				*		2	8	8.9
16	6.0			*		*	*	*			1	1	1.1
17+	1.6			*		*		*			1	6	6.7
18	1.2			*		*		*			2	1	1.1
19	0.8			*		*			*		1	1	1.1
20+	4.6			*		*				*	1	4	4.4
21	6.0			*		*	*			*	2	1	1.1
22	4.8			*		*	*				1	1	1.1
23	12.0			*		*			a		1	1	1.1

Legend:

P: land preparation: 1 manual, i.e. digging
2 mechanized, plough, ox drawn
3 mechanized, plough, tractor drawn

S: sowing/fertilizing: 1 manual
2 mechanized, planting machine

D: dusting against diseases

W: weeding: 1 manual, once
2 manual, twice
3 mechanized, i.e. spraying.

a: weeds by combining manual labour with a tractor

Crop index: 1 maize pure
2 maize intercropped with beans

Source: own survey

Table 6.4 displays the average labour input per hectare for the various farm tasks. Farming intensity was measured in terms of man-days per ha. It is obvious that the choice of how and with what kind of instrument the tasks are to be performed on the farm is mirrored in several levels of farming intensities. The accompanying Figures 6.2. and 6.3 show the farming intensity of the representative farming styles. Table 6.3 and 6.4 both indicate that problems of labour peaks occurring for crucial tasks, such as preparation and sowing/fertilizing, are resolved differently. The dominant trend for the problem of labour peaks to be resolved by mechanization of land preparation (type 10-23 in Table 6.3 and Figure 6.3)) and to a lesser extent by planting machines (type 16-23). The ox plough represents a good and cheap alternative to even out the labour peak, but it is not widely applied in the district.⁶ The only option available for the households who cannot afford mechanization is to employ the jembe (hoe) and to rely on manual labour input (type 1-4).

Table 6.4. Average labour input per farming task in the sample (N=89, 1 non response)

Farming tasks	Man days hectare	Per percentage households
<i>Land preparation</i>		
manual (P1)	112.8	22.2
ox ploughing (P2)	15.0	14.4
tractor (P3)	1.8	62.2
<i>Sowing/fertilizing</i>		
manual (S1)	21.6	81.1
mechanized (S2)	1.3	17.7
<i>Weeding</i>		
manual (once) (W1)	28.3	34.4
manual (twice)(W2)	57.7	56.6
spraying (W3)	2.9	5.5
<i>Dusting</i>		
manual (D)	4.0	12.2
<i>Harvesting</i>		
manual (beans)	15.8	38.8
manual (maize)	34.3	98.9

N.B.:The percentages do not total 100% due to rounding and the fact that one interview was rejected for calculation of this data.

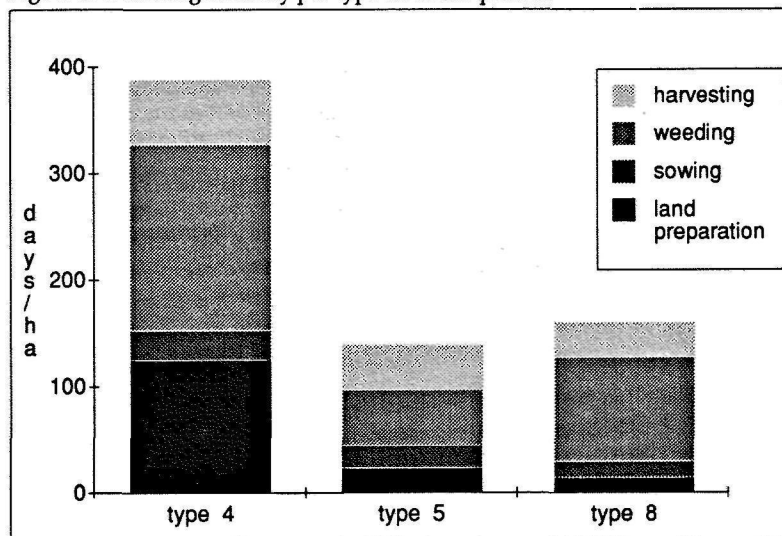
Source: own survey

The manual farming style (type 4 from Table 6.3 and Figure 6.2) is characterized as follows. Labour input is high in all farm tasks. This farming style can, therefore, be labelled as a labour-intensive farming style (the so-called I-calculus) relying primarily on manual labour input. All these households were intercropping maize and beans and weeded twice.

The households without any form of mechanization almost all cultivate holdings smaller than three hectares (i.e. 85 %). Most of these smaller holdings in the sample area are located in Kapkangani sub-location. It is not surprising that the majority of the households here farm by means of hands and hoes only. This holds true for 64 % of all the households visited in Kapkangani sub-location, being 86 % of all the manual farming households in the sample. Next

to the size of the farms and the cash income from farming and other sources, the ecological setting is another explanatory factor for the low degree of mechanization. Much of Kapkangani sub-location, for instance, is not really suited to mechanized ploughing, partly due to the steep valleys and the many small rural access roads.

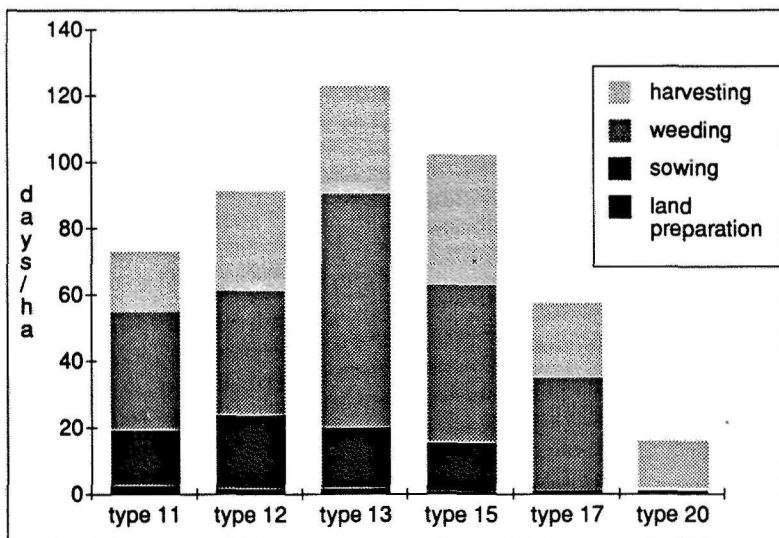
Figure 6.2. Farming intensity per type of labour process



The labour input of the types preparing the land by employing an oxen plough (type 5 and 8) are shown in Figure 6.2. The difference between type 5 and 8 is that weeding is carried twice in the latter. Ox ploughing is mainly undertaken by households with farms larger than three hectares (i.e. 86 % of the ox-ploughing households). It is, perhaps, striking that of all the ox-ploughing households 36 % are located in Mosombor sub-location, representing almost half of all the households interviewed in this sub-location.

The total labour inputs of the main types in the mechanized, low labour input farming style category (type 11, 12, 13, 15, 17, 20) are shown in Figure 6.3. This mechanized farming style can be labelled as a labour extensive-style of farming (the so-called E-calculus). The differences between these types is attributed to the sowing and weeding methods applied. Maize was mostly planted in pure stand. As already emphasized earlier, the degree of mechanization follows the increase in holding size: more than 60 % of the households using a tractor for ploughing own holdings larger than five hectares. For those who, in addition to a tractor, use a planting machine, the proportion is 88 %. and 100 % of those who also spray instead of manual weeding have holdings of more than five hectares. The highest degree of mechanization is found in Ndulele and Ndalat sub-locations. All the

Figure 6.3. Farming intensity per type of labour process



households interviewed in Ndalat and almost all (93 %) of those in Ndulele have mechanized land preparation. Together these households form 42 % of this category. Explanations are, as in the case of Kapkangani sub-location, on the basis of farm size, i.e. advantage of scale, and the open and rather flat environment.

Dusting is done by hand and mainly on farm larger than five hectares (i.e., 88 % of the dusting-households). Dusting does not consume too much labour time (i.e., an average of 4.0 man days per hectare) and is normally done in a period of low labour requirements (between sowing and weeding). Due to the relatively high costs involved, this farming activity is mainly restricted to the larger holdings.

6.5. Production and reproduction of the farm enterprise and the household: incorporation into the market

The market plays a crucial role in the agricultural economy of the district. Inputs for agricultural production increasingly appear as commodities in the production process, and produce is largely disposed of on the market. In addition, consumption needs of households are increasingly satisfied through maintaining commodity relations. Access to money (or capital), obtained by selling produce or off-farm work, is thus an essential ingredient of the economic strategy of the households in order to sustain production and reproduction.

The importance of the market varies widely, however, by crop as well as by farm enterprise and household. Production of maize, coffee and tea is completely commoditized. The physical inputs for these crops are purchased

goods, and output is fully commercialized. Dairy farming is only partly commoditized and contrary to maize, coffee and tea, the commoditization of beans, vegetables and fruits hardly took place. Generally, all the inputs are reproduced on the farm.

Crops are also disposed of differently. The degree of commercialization of agricultural production is fairly high: for example, 61 % of total maize output is marketed. While all households in the sample produced maize, 71 % of them market maize on the formal or informal market as is shown by Tables 6.5 and 6.7. While nearly all households (98 %) owned one or more cows, 61 % sell milk on the market and 40 % of total milk output is marketed. Furthermore, 18 % of the households in the sample produced and marketed one of the two export commodities grown in the district, i.e., tea and to a lesser extent coffee. Food crops (such as beans, sukumawiki [spinach], potatoes) and fruits (bananas) are primarily produced for home consumption, although some households, approx. 25 % of the sample and mainly located in Kapkangani, have commercialized these crops.

Table 6.5 points at regionally differentiated commercialization strategies in the district. Ecological conditions for tea and coffee production may contribute to this. The table displays unquestionably that production for home consumption is the dominant pattern in Kapkangani compared with the other sub-locations. It also shows that the farming strategies of the people in Kapkangani are more diversified and entail also the commercialization of minor food crops such as beans. The much smaller average size of land holdings in Kapkangani is an explanatory factor.

Table 6.5. The degree of participation of households in production and sale of agricultural produce (in % of households) by sub-location (N=90)

Sub-location	Maize		Milk		Beans		Potatoes		Coffee /tea prod
	prod	sell	prod	sell	prod	sell	prod	sell	
Kapkangani	100	41.3	93.1	24.1	72.4	48.3	31.2	6.9	3.4
Kibwareng	100	55.5	100	77.8	44.4	22.2	22.2	22.2	55.5
Kipsigak	100	87.5	100	68.7	75.5	6.2	20.0	6.6	31.2
Mosombor	100	81.8	100	50.0	9.1	9.1	9.1	9.1	27.3
Ndalat	100	100	100	80.0	0.0	20.0	20.0	10.0	0.0
Ndulele	100	93.3	100	86.6	60.0	6.6	33.3	20.0	13.3
Overall	100	71.1	97.7	61.1	51.1	23.3	11.1	18.9	17.7

Source: own survey

6.5.1. Commoditization of maize and milk

The importance of the market for maize production was the subject of the survey. As pointed out earlier, market relations in respect of dairy farming inputs were not part of the research. Only the degree of commercialization of milk was emphasized.

The introduction of hybrid maize varieties (HYVs such as H614, H613, H612, H625) at the beginning of the sixties, increased the level of commoditization substantially by breaking down non-commodity forms of

reproduction. Seeds and the now necessary fertilizers became commodities for households. Reproduction of the farm, very obvious in the case of maize, is clearly commoditized. Table 5.6 shows that the use of hybrid maize is 100 % (i.e. a commoditization degree of 100 %), while fertilizers are applied by 93 % of the sample households. The high adoption rate of fertilizers indicates the acceptance of HYV-seeds with a package of associated biochemical inputs, in this case mainly fertilizer and, to a much lesser extent, pesticides.

Table 6.6. Adoption of HYV-seeds and associated package of biochemical inputs (N=90)

Package	% of h.h
HYV-seed+fertilizer+pesticides	6.6
HYV-seed+fertilizer	86.6
HYV-seed only	6.6
Total	99.8

Source: own survey

The level as well as the speed of the adoption rate of the commodity package for hybrid maize can be explained in the context of the transformation of a self-sufficient production process into a market oriented production process. A quantitative analysis to prove the correlation between 'the degree of adoption of commodity package' and 'the degree of commoditization' appeared, however, problematic. The correlation coefficient of +0.40 between 'degree of commercialization' of maize and 'adoption of the commodity package' points at a strong relationship between the two variables. One would have expected, however, a higher correlation coefficient. That it is not so may be attributed to the undifferentiated nature of the variable 'package' since a large majority of the farming population adopted hybrid seeds and fertilizers (Table 6.6).

This suggests that other factors or a combination of factors, such as the rational economic behaviour of the farming population, the favourable ecological conditions in the district, the availability of the inputs, labour and services, or pressure from above or from external agencies explain more. The question 'why was HYV-maize seed adopted' was generally answered with 'the expectation of getting higher yields from it'. The fact that the commodity inputs were indeed widely available in the appropriate quantities in the district must have contributed to the fast adoption of the HYV-package. But we must not underestimate the influence of local and central state institutions: the extension service and the Kenya Seed Company in particular launched an aggressive campaign to increase the adoption rate of hybrid maize seed in Kenya (see Chapter 7). Public statements by local and national political leaders that hybrid maize production is good for the nation is another - but hard to measure - contributory factor.

The adoption of HYV-seeds in combination with fertilizer application in relation contributed to a considerable capitalization of production in comparison with maize based on local varieties, but it did not prevent the adoption of the package. This happened despite that with the increase of capitalization of maize production, the costs, which involve a.o. purchase of

inputs and transport, increased considerably. The average cost for fertilizers represents 30 % of the total production costs (wage labour, tractor hire and physical inputs for maize farming), while the average costs for HYV-seed is 12 %.⁷ The much publicized aversion-of-risks strategies of peasants and the fear of incorporation into the market did not seem to have played a crucial role in the adoption of the package.⁸

Non-commoditized forms of maize production are, because of the adoption process, sporadic in the district. Some very few households in our sample still planted some local maize but on a very small scale (i.e. less than 0.1 hectares) and solely for home consumption. Neither is cow dung not much applied as manure in Nandi district. Only a few farmers reported practices of shifting their maize plots to the cows' grazing areas once in a while. Surprisingly, all the cases of non-commoditized maize farming we found were in Kapkangani sub-location.

Milk production seems to be hardly commoditized. On the one hand, labour mobilized for grazing and milking is mainly household labour. The inputs for livestock production are mainly non-commoditized. Pasture maintenance, watering and grazing are primarily activities taking place without dependence on the market. The livestock management system is mostly based on grazing in fenced pastures and/or on the maize plots after the maize is harvested. Only for the larger farms employing a permanent labour force can it be argued that livestock production is integrated or depending on the wage-labour market. A few farms in the sample area as well as some outside the sample had changed from this management system to an intensive dairy system of paddocking, supplementary feeding and mechanization of milking. Hiring wage labour is also an essential element of this system.⁹

Zero-grazing, i.e., a livestock management system centred on grazing in fenced pastures and supplementary feeding which is obtained on the market or on the farm itself (by planting napier grass), occurs but not widely yet. Zero-grazing in fenced pastures in combination with napier grass production on the farm itself is particularly recommended by the extension department for the small-scale farmer in the district. Zero-grazing is part of the national Dairy Development Programme (DDP) to increase marketed milk production in the country through the development of a technological package specially designed for, and with, small-scale dairy farmers. Recently, in 1988, the DDP was extended to Nandi district.

The envisaged expansion of zero-grazing in smallholder livestock production in the DDP requires, however, the fulfilment of three crucial preconditions by the smallholder in question. In the first place, napier grass planting requires adequate application of fertilizers. In the second place, a sufficient quantity of land must be devoted to planting napier. The major slogan of the programme is, therefore, zero-grazing in combination with destocking and upgrading of the stock left. The question which remains is whether the acreage for sufficient napier grass production is available on the smallholder farm.¹⁰ In the third place, napier planting is labour intensive. Again here we can raise the question as to whether that labour is available, especially when it interferes with commercial and subsistence maize farming. The rational choice of the smallholder to concentrate on commercial dairy farming will depend on estimates of the financial returns. DDP-programme officials emphasize that the financial returns on milk are high. The quality of

the stock is crucial too in this respect.¹¹ In addition to all this, veterinary services must be available to maintain animal health care.

The assessment of commoditization of milk was not an intrinsic part of the survey. The above estimates are merely based on observations and not on quantitative data. Reports from DDP project areas point at the above assessment and indicate clearly that the degree of commoditization of dairy farming and the underlying farming strategies vary considerably.

Production of maize and milk is for both subsistence and commercial purposes. Sixty-one percent of the total maize output in the sample is disposed of on the market, while almost 65 % of the total milk output is sold to the Kenya Cooperative Creameries (KCC) or the local market. The National Cereal and Produce Board (NCPB) is the largest buyer of maize in the district; the local maize market is very small. Nearly 90 % of the total marketed output is sold to the NCPB. Seventy-one percent of households sell maize, while 61 % have commercialized milk production. Smallholders, more or less as a general rule, sell the 'morning' milk and retain the 'evening' milk for home consumption.

The following table indicates that households developed different strategies. The magnitude of this can be shown by the degree of commoditization/commercialization and of households' participation in the selling of maize and milk. The degree of commoditization is calculated by dividing the share of production marketed by total production on the farm. The degree of participation is the proportion of households involved in production for the market. The orientation of production towards the market differs significantly by holding size. The low degree of commoditization and participation in maize and milk for the smaller holdings indicates that the protection of subsistence reproduction is the main rationale of their farming strategy, although, money obtained either by selling maize and other commodities or involvement in off-farm work is crucial in order to secure the purchase of production inputs for the following maize production cycle.

Table 6.7. Mean degrees of commoditization and participation in maize and milk sales in Nandi by holding size (in %, N=90)

Holding size (ha.)	Degree of commodit. maize	Degree of particip. maize	Degree of commodit. milk	Degree of particip. milk
0-1	8.3	16.6	10.0	16.6
1-2	32.5	66.7	17.1	26.7
2-3	22.6	38.5	29.6	30.8
3-4	44.6	88.9	30.7	55.6
4-5	21.3	42.9	35.7	42.8
5-	56.6	92.5	60.1	85.0
Overall	40.9	71.1	40.4	61.1

Source: own survey

Apart from selling and consuming maize at home, two other ways of disposing of maize can be found in the district: maize may be given as gift to other households and/or relatives or as fed to stock. These ways of disposing

maize were not, however, covered by the survey, because, on the one hand, gifts are hard to quantify in terms of weight: 'We occasionally do this but I do not know how much', and, on the other hand, maize as fed to stock was in many cases precisely that maize which could not be consumed or sold: the rotten maize was given to the cows. Both these forms of maize disposal were treated as unmarketed production.

6.5.2. Consumption needs and the market

It is clear that reproduction of the household is only partly commoditized. For instance, only 4.6 % of the totally home-consumed maize is purchased, while consumption of sukumawiki, beans, and fruits is mostly covered by own production. All the households which purchased maize for home consumption were those with holdings smaller than 2 ha. On the other hand, consumption of other basic consumption goods (kerosene, sugar, tea, bread, meat etc.) is fairly high.

When a comparison is made between the sub-locations, it is striking that the average food expenditures for items such as maize, milk and vegetables are much higher in Kapkangani and Mosombor sub-locations than in Ndulele and Ndalat sub-locations. The average size of holding in the first two sub-locations is apparently too small for simple subsistence production. This forces these households to sell maize and thus, when their grainaries are empty, to purchase food at times when the price of food, particularly maize, is high - i.e., the period before the next harvest. The sale of maize and/or milk, or involvement in off-farm work is necessary to obtain cash with which they can purchase the necessary inputs for the following production cycle, purchase other basic food items and pay school fees for their children.

6.5.3. The importance of straddling

The data indicate that a considerable proportion of the households in the sample (i.e. 55 %) are 'straddling' agricultural production and off-farm economic activities. The 1962/63 survey as well as MacArthur's research (see Chapter 5) already pointed at the importance of 'outside sources of income'. In some cases, as can be seen from Table 6.8, reproduction of farm and household is only guaranteed by combining farming and off-farm activities. A large proportion of households diversified their economic activities. Only 45 % of households reproduce farm and household solely by selling agricultural commodities.

The nature of the off-farm activities or secondary occupations varies widely (see Table 6.8). The largest share of the households is engaged in self-employed non-farm activities: running a *duka* (small shop) and other forms of petty trade. Fourteen households reported having extra cash income by receiving remittances from relatives not residing at the farm and/or from household members living on the farm but not working on the farm. Two households reported receiving money in the form of a small pension from former employers. For eight of them who had no secondary occupation, remittances from household members appears to be the only means of replenishing negative farm income.

The table discloses a clear correlation between, on the one hand, the nature of the secondary occupation and the amount of income derived from it: the larger the investment needed to undertake such an off-farm activity, the more

money it brings. On the other hand, off-farm income and farm income also correspond closely with holding size. Without exception, the wage labourers cultivated the smallest holdings and obtained negative average farm incomes. Conversely, those engaged in tractor hire and transport enterprises invariably cultivated the largest holdings in the sample and earned above-average agricultural incomes.

Table 6.8. Secondary occupation of head of household in the sample (N=90) and mean income from agriculture and off-farm work or enterprise (Ksh)

Nature of secondary occupation	% of h.h.	Mean agricultural income	Mean off-farm income
None	45.6	12,340	1,212*
Wage labour	8.9	-345	4,028
Self-employed	25.5	10,479	4,053
Tractor hire/transport business	10.0	79,750	85,160
Salaried jobs	10.0	3,339	26,446
Total	100.0	17,594	20,149

* cash revenue in the form of remittance from relatives and family members
Source: own survey

Two patterns of 'straddling' are distinct in the sample. We can distinguish between *flows of money* and *flows of capital*. In the first case, off-farm revenue from casual agricultural wage-labour work, migratory male wage labour and petty trade, is *either* a necessity for sustaining agricultural and particularly food production and livelihood at a certain level, or a means to maintain an above-average level of consumption. Money earned off the farm is a.o. used to purchase production inputs (seeds, fertilizer and/or labour) and to pay school fees. This kind of income is especially relevant for those households cultivating small holdings and for those with a negative farm income. Whether off-farm revenue is a necessity or otherwise, it is money being transferred from non-agricultural sectors to the agricultural sector, as a way to protect the means of subsistence. It is usually revenue from economic activities requiring low levels of investment and low labour skills. The remunerative effect is mostly limited as these activities involve low-paid jobs.

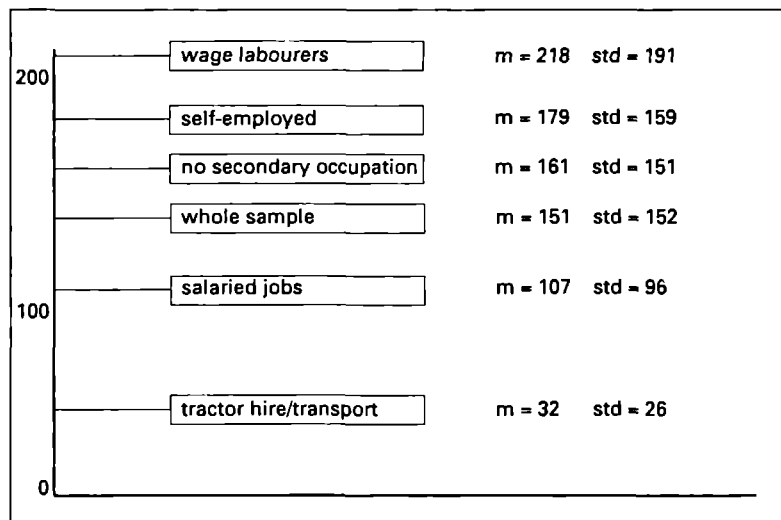
In the second case, when we deal with capital transferred from the agricultural to the non-agricultural sector and vice versa, off-farm income come primarily from regular sources. Here too we can distinguish two patterns. Off-farm income can be the result of investment of capital which is generated in agriculture and accumulated on a 'higher' level. This pattern is significant for the majority of farmers who operate tractor hire and transport enterprises.¹² Revenue is invested in non-farm activities, i.e. transport- and tractor hire enterprises, grain mills, large-scale trade, hotels, etc. Money becomes capital. A second significant pattern is that off-farm income can be used to buy agricultural means of production (mainly land). This appeared to be quite significant for those occupying a salaried position (teachers, town clerks) who have invested in (more) land. In both cases, more property

(agricultural, urban and non-agricultural based) is acquired. Straddling agricultural production and off-farm work is part of the strategy to create or to expand the basis of accumulation of capital in agriculture and/or in other sectors of the economy.

The importance of secondary occupations leads to the important question as to who can be labelled as a real peasant who lives basically from the fruits of family labour and family land. These characteristics would fit to the middle peasant strata closely. In other words, the difference in participation in the agricultural production process is of strategic importance for agricultural development.

The following figure (6.4.) sheds at least some light on this crucial question.

Figure 6.4. Mean farming intensity by secondary occupation in maize farming (N=90)



This figure indicates a significant relationship between farming style and the nature of the secondary occupation. The intensity of farming varies considerably for the identified secondary occupation groups: all groups designed different farming styles, ranging from labour intensive and manual labour strategies to labour extensive and mechanized farming. In addition, as is shown in the following table, labour input is mobilized differently and through different social relations.

The agricultural wage labourers and the non-secondary occupation groups mobilize less wage labour and rely largely on non-commoditized, non-paid family labour, while those engaged in white collar jobs and tractor hire and transport enterprises rely primarily on wage labour. Apparently the higher remunerating effect of investment in non-agricultural sectors of the economy is a crucial criterion in the development of a labour extensive farming style.

The other extreme, the labour intensive farming style, is developed by those

Table 6.9. Share of wage labour of total labour input by secondary occupation (in %, N=90)

Secondary occupation	Wage labour
None	20.5
Wage-labourers	23.6
Self-employed	46.6
Salaried jobs	84.6
Transport/tractor hire	85.6

Source: own survey

households who face a regular deficit and earn a little income off the farm. It is obvious that they cannot afford to hire labour and mechanize farming. Two other groups, i.e., those who rely mainly on agriculture and those who are involved in petty trade and other self-employed operations, also designed a rather intensive farming style, although in the latter case, the combination of trade and agriculture points at a certain wealth, albeit far less than those engaged in large-scale enterprises. Income is invested in mechanization of land preparation (i.e. tractor hire) - as well as in consumption - the rest of the farm tasks remain non-mechanized and are performed by a mix of household and casual wage labourers.

6.5.4. Distribution of income

The following tables show, when we consider the two sources of income, that the level of reproduction of household and farm differs significantly for the households in the sample. Data on income distribution (Table 6.10) indicate that income - and opportunities to earn income outside the farm - is unequally distributed among the farming population.¹³ Figure 6.5. shows the Lorentz curve for the distribution of total income in the sample area.

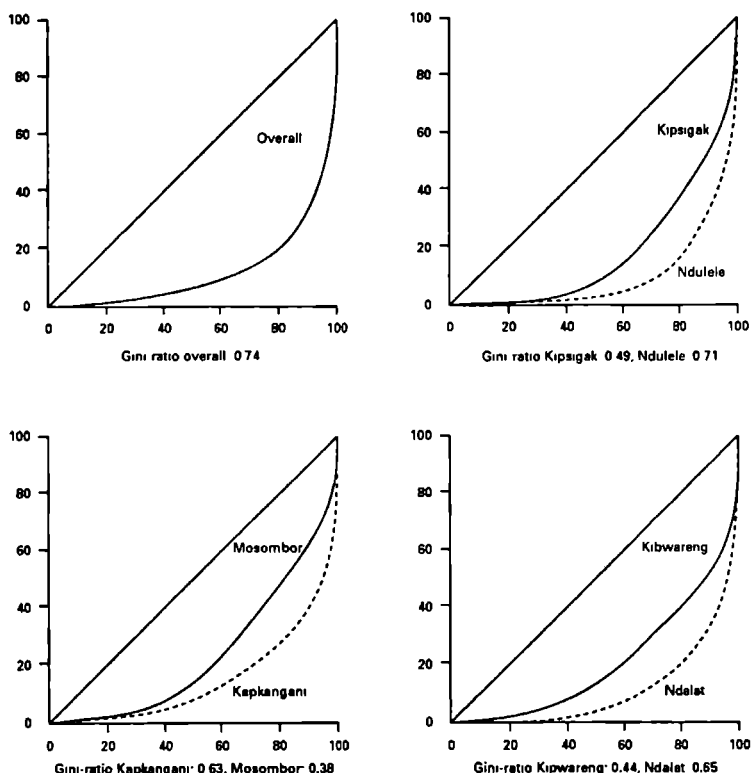
Table 6.10. Mean income by income group in the sample, in Ksh (1987, N=90)

	Negative	0-2000	2000-4000	4000-6000	6000-8000	8000-10000	10000-more
Farm operating surplus	-2,417	-285	629	882	4,411	7,804	31,764
Off-farm income	0	1,235	2,164	3,987	2,800	937	24,066
Total income	-2,417	950	2,793	4,869	6,9148	8,741	55,830
Savings	'much'	0	0	0	500	0	16,137
Number households	1*	13	13	8	6	4	45

* a rentier, surviving on savings only; the amount of savings was not reported
Source: own survey

The Gini-ratio expressing the degree of inequality of total income indicates that income inequality is severe but varies by sub-locations. When we compare the Lorentz curves and corresponding Gini-ratio of distribution of land and income (see Figures 6.1 and 6.5), then the importance of off-farm income is paramount. Assuming that distribution of land patterns would give rise to the same distribution of agricultural income patterns, the inclusion of off-farm income in total household income, however, makes the picture of income inequalities even more extreme. The comparison shows that both the opportunities for off-farm income and the remunerating effects, are unequally spread.

Figure 6.5. Lorentz curve for the distribution of income



6.6. The institutional environment for farming in Nandi

So far, we have described farming in Nandi district 'behind' the farm gate and in relation to the market. In the following we shall briefly examine farming in Nandi in relation to the institutions providing the agricultural population with

services and capital, and which are responsible for the operation of the market. The state has played a crucial role in the establishment of these institutions (see Chapter 3). The historical trends in the building of the institutional 'environment' in Nandi and its impact on commodity production have been dealt with earlier. In this section we shall concentrate on the contemporary features of the agricultural credit system, extension service, input supply and marketing and shall emphasize the linkages between the institutions and the farming population.

6.6.1. Agricultural credit

The importance of agricultural credit has been emphasized earlier. In the past, access to credit widened in the past the gap between large and medium-scaled land owners and between sparsely and densely populated regions (see Chapter 5, section 5.2.3.). Information from the Annual Reports revealed that credit was primarily used to improve and expand of maize and graded dairy farming. There was no accurate information available, however, to assess who is receiving credit. The survey indicates, in the first place, that incorporation into the agricultural credit capital market is low. Seventy-one percent of the households have never tried to get - or where denied - access to the credit system. This indicates that investment in agriculture is financed mainly by commercializing production and/or by off-farm cash income. Only 29 % successfully gained access to the credit system. These loans were used for several purposes, ranging from expansion of cash crop (i.e. tea) production, to purchases graded dairy cows and financing of fencing and implements (tractors, planting- and milking machines).¹⁴ In the second place, those who obtained a loan through the formal credit system owned, without exception, farms larger than 5 ha. In other words, the institutions charged with the provision of credit to the farming population are biased in the sense that the farming population is not treated equally.

Several reasons can be put forward to explain the low incorporation into the capital market. In the first place, there exists the articulated fear of not being able to repay a loan. The interest rates on loans are rather high (12 % to 14 %). Risk aversion contributes to the fact that loans are not often applied for in the district.

In the second place, discriminatory regulations of private commercial banks prevent the access of households with a small resource base to agricultural capital.¹⁵ This implies that only households with a certain security (i.e., enough land and/or considerable farm and non-farm income) are eligible for loans.

In the third place, in theory, every farmer should have access to state controlled credit. The practice of credit schemes administered by the state through the AFC, however, shows that access does not appear to be easy for resource-poor households. Both the AFC and commercial banks are starting from a risk aversion strategy: who is able to repay the loan ? This implies working with clear definitions of the 'economic viability' of a project for which a farmer requests a loan. This results in the situation where large farmers, who have viable projects in the view of credit institutions, have access to credit. Large farmers, at the same time, appear to be able to command access to credit. A local AFC-credit official verbalized it as follows: 'They are able to bulldoze through the organization and get their loans easily approved'.¹⁶

6.6.2. Extension service

The survey revealed that the extension service is rather selective. Fifty-five percent of the interviewed households did not have any direct or indirect contact at all with extension officers. The majority of these are small and resource poor farmers. Neighbours, friends and relatives appear to be the major source of information and the reason for adopting a certain technology package and husbandry method. Those who receive regular attention from the service appear to be the large scale farmers in the sample: more than half of those visited by extension officers have holdings larger than 4 ha. Furthermore, it is striking that the extension officers visiting small farmers tend 'to sit down and talk', while those visiting large farmers are actively helping to plant maize and/or to adjust the planting machine. Is this situation a coincidence or is it structural? Striking too, perhaps, is the situation that the largest and most innovative farmer in the sample, who happens to be the largest 'mechanizer', receives visits from students of the nearby situated agricultural school (the so-called Baraton University) at least three times a year.

The actual practice of the extension service shows too that it is rather biased.¹⁷ One of the factors contributing to that situation is the method of selecting a target farmer (see Chapter 5, section 5.3.). These criteria, as well as the extension message, are set in accordance with the perception of the extension service proper and they are not set in accordance with the existing social differences and the technological heterogeneity so characteristic for the farming population in the district (see Table 6.3). On the one hand, a farmer becomes a target, or rather model, farmer when he shows himself to be innovative minded (i.e. 'progressive'). On the other hand, the service advises uniformly as if the peasantry is a uniform social category. New practices and technological packages are introduced as if they are scale neutral, i.e., applicable to all farmers irrespective of holding size and scale of operation. One exception to this rule is, however, the dairy development under the umbrella of DDP which aims directly at the smallholder.

If we view the success of extension from the perspective of extension department, two facts suggest that extension is a successful operation: on the one hand, the high rate of adoption of the hybrid maize package (see Table 6.5); on the other hand, the uniform application of maize seed and fertilizers. The advice of the extension service to plant 10kg of maize and apply 25kg of fertilizer (DAP) per acre (=0.4 ha.) is to a large extent implemented by the farming population.¹⁸

6.6.3. Input supply and marketing

The smooth functioning of a hybrid maize production cycle stands or falls on the availability and timing of the necessary farm inputs. The organization of input supply is often criticized for its inefficiency. The inputs are either not appropriate or not in time. In the past some, distortions did occur in Nandi district. The situation in 1987 was that input supply was rather well organized and that the appropriate inputs were widely available at the right time. The chief supplier and distributor of hybrid seeds, fertilizer and pesticides in Nandi is the KGGCU. The KGGCU distribution channel is characterized by a dense network of private distributors supplied by the KGGCU which operates from its Kapsabet depot. In close cooperation with numerous licensed stockists

situated in the numerous market and trading centres, an efficient and smoothly operating distribution network provides the farming population with production inputs. The survey indicates no occurrences of not-availability or inappropriateness of the seeds and fertilizers. Seen the purchases of 2 kg and 10 kg bags of maize seed, it was a wise decision of the KSC to pack such quantities (see Chapter 7, section 7.1).

The major institution responsible for the marketing of maize in Nandi district is the NCPB. The NCPB operates from a monopoly position¹⁹, i.e., it is the sole buyer, thus determining at the same time the price paid to the farmer who delivers maize to its depots. Marketing boards in Kenya are frequently criticized for their inefficiency (see Chapter 7, section 7.2.). The problem most commonly cited with marketing board is the dubious practice of late payments to the producers. In Nandi district, farmers were confronted with the same practice. A large majority of the interviewed households selling maize to the NCPB reported severe negligence concerning the time of payment. Late payment is severely felt by resource poor households, i.e., those who suffer from a budget squeeze and whose only cash income comes from selling maize. This is not the case for the richer households which tend to have other sources of agricultural income as well as larger off-farm incomes. The consequence of this practice is observable in the district: poor households have to plant late and consequently will be faced with much lower yields.

6.7. Rural differentiation in Nandi district.

Now that we have presented the main results of the survey, we can examine the question of social differentiation and the effect of the operation of the market.

Starting from the analytical framework presented in Chapter 1, section 1.3.3, we can divide the Nandi peasantry into groups whose conditions of life are different, according to a) the levels of production and reproduction of farm enterprise and household and b) the social relations of production. The data presented above show clearly that incorporation into markets is considerably high in Nandi district but highly differentiated when households are considered separately. There exists a clear demand for agricultural wage labour, and the level of mechanization of certain farm tasks which involve wage labour is high. The tables on distribution of the principal means of production (land) show clearly that the conditions for agricultural commodity production are not equal for all households. Furthermore, as income distribution figures show, this is mirrored in different levels of reproduction of farm and household. The data on income also reveal that straddling agriculture and secondary occupations is an important ingredient of farmer strategies. Straddling, and more particularly the nature of the secondary occupation and accumulation patterns derived from it, must therefore be part of the analysis of rural differentiation in Nandi district.

The following classification method was employed in order to acknowledge the difference in quality of life among the agricultural population in Nandi district. It must be stressed, however, that it is a *static* picture as it is the result of just one momentum of production and reproduction. No other empirical data were available to compare with the 1987 survey results. This means that we cannot talk about rural differentiation as a process. Furthermore, as has been argued earlier, the picture is incomplete,

since one important stratum of the rural population was not covered by the survey: the landless.

With the concrete situation in Nandi district in mind, we commenced with the reasoning of two sets of criteria, on primary and secondary level. The primary set of measures is based on the proposition that differentiation may develop around the preconditions to be founded in agricultural commodity production. The twin axis of ownership of the principal means of production in combination with the form of labour mobilized for agricultural production and the nature of straddling is considered as a crucial element of the process of social differentiation in Nandi district. First, land (maize hectareage) and the number of cows were identified as the principal means of production in Nandi district. From that base a regular deficit or a regular surplus of production can be obtained. This is mirrored, in its turn in a negative or a positive farm operating surplus. This criterion reflects, at the same time, the potential of the farm and whether it is fully utilized or not, for whatever reason. Lack of capital might be one reason; lack of interest in farming may be another. An additional reason may be that there are 'good' and 'bad' farmers. Under this criterion, households with equal land holdings may belong to different strata. Based on this resource criterion, a distinction between (resource) poor households, middle level and rich households was possible.

Second, the criterion 'number of permanently employed agricultural wage labourers' was used in order to assess the nature of socio-economic development and the linkages between several strata. This criterion facilitated a differentiation between wage-labour hiring households and non wage-labour hiring households and particularly between rich and capitalist farmers. The (casual) hired wage-labour ratio was not used since it is not powerful enough to differentiate between rich and capitalist farmers.

Thirdly, straddling agricultural production and off-farm activities appears as an important ingredient of the farming strategy of the Nandi farming population. The peculiarities and patterns of straddling have been examined before. The nature and underlying objective for obtaining revenue from secondary occupation was used as a discriminating element. By this criterion we are able to differentiate between poor, middle and rich/capitalist households. The latter group is at best portrayed as entrepreneurs. The households experiencing a negative farm operating surplus are compelled to enter the wage labour market or to be engaged in self-employed or petty trade operations, were labelled as poor peasant households. The non-straddling households were labelled as middle peasant households. Those who used off-farm revenue as a means of augmenting consumption were labelled as rich peasant households. Finally, the households transforming money from agriculture and off-farm activities into capital were earmarked as capitalist farmers.

The secondary set of classification criteria was used as complementary to the first set: in the first place, ownership of tractors and planters; secondly, access to agricultural credit, a measure of the 'progressiveness' of the farmer in question. Access to agricultural credit, issued by the government or private banks, especially serves as a perfect means of acquiring more land and of investing in implements (milking machines, tractors for hiring-out purposes) and/or improvement of the quality of land and cattle. In the 1970s in particular, quite a large number of loans were made available to fund those

households who lacked the essential capital but who had the potential and the necessary collateral (i.e. in most cases private land title deeds) and/or money deposits. It was part of the state policy to increase maize and milk production in the district. It has been highlighted earlier that the unequal distribution of credit was a reflection of growing inequalities in Nandi district (see also Chapter 5, section 5.2.3.). As a third and fourth complementary criterion was used the amount of savings and income derived from non-agricultural property (house rent for instance). These four additional criteria were interpreted as qualitative results of past levels of accumulation in agricultural production and off-farm activities. It is quite obvious that these criteria are mainly valid for a rich peasant stratum and the capitalist farmer class.

In line with the method explained in Chapter 1, section 1.3.3. and starting from the primary and secondary sets of criteria, we commenced with the middle peasant household. The *middle peasant* household was defined here as a household solely depending on the farm for sustaining livelihood (i.e. non-straddlers). These households achieve a regular surplus out of the production of agricultural commodities for the internal and international market. Production is primarily based on the application of household labour. Wage labour demand is not zero but mainly limited to mechanized labour demand. However, some households with off-farm income were designated as middle peasant households. The reasoning behind this is that, on the one hand, the level of off-farm revenue is low. On the other hand, the surplus obtained from agricultural production is enough to sustain above average levels of consumption. Straddling was not considered as compulsory in these cases. The sources of off-farm revenue vary from remittances from relatives to petty trade operations or migrant labour.²⁰

Those households which are not in a position to maintain production and reproduction of farm and household on the basis of agriculture were categorized as *poor peasant households*. These households face a regular deficit, and in order to sustain even a meagre subsistence level they are compelled to combine subsistence production with off-farm wage labour, or to rely on remittances from relatives living and working off the farm. The poor peasant households' land base is generally too small and the number of cows too limited to allow reproduction of farm and household on the basis of agricultural production only. The households face a constant crisis of reproduction. Off-farm income is mainly from wages for agricultural work or from migrant labour in towns and other districts, or from small incomes from petty trade. The peasant households with no off-farm revenue but with a negative farm operating surplus, were also characterized as poor peasant households. Some of the households designated as 'poor', however, show signs of much greater potential. They own, for example, enough land to be a middle peasants, but for some reason the potential of the farm is not fully exploited.

The households which marshal a regular surplus from agricultural commodity production were characterized as *rich peasant households*. Some of them are at the same time engaged in renting out implements of labour (tractors) and/or in self-employed business operations. Reproduction of farm and household is thus based on the combination of agriculture and off-farm economic ventures. Agricultural production is, however, the mainstay of their entrepreneurial strategy, a strategy which is largely, but not totally, dependent

on the employment of wage labour. This form of production is becoming increasingly capitalist. Some of them could be labelled as capitalist farmers in spe. When this stratum is able to acquire more agricultural means of production by investment either from revenue obtained in agriculture or in off-farm ventures or from agricultural credit sources, they could join the ranks of capitalist farmers in the district.

The households for which agricultural production is solely based on the employment of wage labour and, in addition, whose off-farm economic ventures (if any) are primarily result of someone else's labour, were labelled as capitalist farmers. They maintain a considerable level of capital accumulation in agriculture as well as in other spheres of the economy.

Finally, a group of households can be identified that are extremely difficult to characterize as 'peasant households' or farmers. This group, mainly consisting of teachers and other government officials, was earmarked as '*part-time farmers*'. They farm, but reproduction of farm and household is basically sustained by work outside agriculture as the head of the household occupying a salaried position within the local state apparatus. Some of them are also engaged in petty trade and have invested in urban property. Farming was designated as a secondary occupation for this group. This does not mean, however, that they are not investing in agriculture: at least one of these part-time farmers invested considerable sums of money in land, even in areas outside the district.

The categories of rural strata in Nandi district as defined above, were distributed as follows (Table 6.11).

Table 6.11. Classes and strata in Nandi District (%) (N=90)

Peasant stratum	%
Poor peasant households	31.1
Middle peasant households	44.4
Rich peasant households	8.9
Capitalist farmers	5.6
'Part-time' farmers	10.0
Total	100.0

Source: own survey

6.7.1. Differentiation and commodity production in Nandi district: wealth and crisis

Given the patterns of stratification/differentiation, elaborated above, some crucial data are re-represented to show the significance of differentiation in relation to participation in a commodity economy and continuing processes of commoditization in Nandi district. One clear trend is emerging. On the one hand, we find enrichment and prosperity of a few privileged households; on the other hand, impoverishment and adversity of a relatively large group of households. In between these two extremes we discern quite a large group of households which are relatively prosperous.

Table 6.12 discloses the distribution of revenue from sales, assets and property among the identified strata in the district. The capitalist farmer class accounts for a considerable share of marketed agricultural production in the district. More than 40 % of gross revenue from sales is realized by 5.6 % of the households. Their large share is a reflection of the means of production owned (land and cows) as is shown in Table 6.13. The share of the middle peasantry (i.e. 45 % of the households) in Nandi district of gross revenue from sales is slightly less than 30 %.

Table 6.12. Share of peasant strata of sales of maize and milk and gross revenue (% , N=90)

Peasant stratum	Maize sale value	Milk sale value	Gross revenue sales
Poor peasant households	2.0	0.2*	1.3
Middle peasant households	28.1	**27.5	28.5
Rich peasant households	30.6	17.6	22.2
Capitalist farmers	30.2	51.4	42.6
'Part-time' farmers	9.1	***3.3	5.5
Total	100.0	100.0	100.1

* only one of these households sold milk

** 17.5 % of these households do not sell milk

*** 50.0 % of these households do not sell milk

Source: own survey

The share of the several strata in revenue from commodity production is obviously reflected in their possessions. Table 6.13 reveals the inequality clearly. The degree of inequality would be even larger if the data allowed us to include whether the stock consists of graded cows, crosses or zebu cattle.

Table 6.13. Average possessions of land and implements by peasant strata in the sample (N=90)

Peasant stratum	Maize hectar.	Number cows	Number jembe	Ox plough	Tractor
Poor peasant households	0.8	3.5	2.8	0.1	0.0
Middle peasant households	1.5	6.8	3.9	0.3	0.0
Rich peasant households	2.4	11.8	1.8	0.4	0.4
Capitalist farmers	7.6	53.2	0.4	0.0	1.0
'Part-time' farmers	2.4	5.5	3.0	0.2	0.0

Source: own survey

Table 6.14 shows that different farming strategies underlie each stratum's share of maize revenue and sales. The poor peasant households and also, but to a much lesser degree, the middle peasantry have designed a maize farming strategy essentially to attain subsistence needs. Their incorporation into the market for maize is considerably less than the other groupings. On the other

hand, Table 6.14, as well as other tables, points out that the poor peasant household in particular faces a reproduction crisis. Eight-five percent of them regularly purchase maize on the market for home consumption. Their resource base is too small to sustain subsistence production, while the commoditization of inputs for maize requires incorporation into the market. The market clearly restricts their choices to arrange a farming strategy of their own choosing.

Table 6.14. Degree of commoditization of maize production and of maize consumption; degree of participation in sale and purchase of maize (N=90)

Peasant stratum	Degree of production (sale/total output)	No of h.h	Degree of consumption (purchase/total home consumption)*	No of h.h
Poor peasant households	18.7	39.2	18.4	85.7
Middle peasant households	47.9	85.0	2.5	22.5
Rich peasant households	84.7	100.0	1.3	12.5
Capitalist farmers	73.9	100.0	0.0	0.0
'Part-time' farmers	57.8	62.5	2.5	20.0
Total	61.2	71.1	4.6	40.0

*: includes also the maize fed to livestock

Source: own survey

Table 6.15 also indicates other aspects of the reproduction crisis of the poor peasant stratum. Obtaining negative net agricultural income implies generating revenue from casual or permanent wage-labour employment and/or low paid self-employed activities. The self-employed economic activities they are engaged in are typically those activities requiring low investment (market trade) and where they face considerable competition from other people.

Table 6.15. Average income per peasant stratum and share in total income (N=90)

Peasant stratum	Net agricult. income (Ksh)	Off-farm income (Ksh)	Total income (Ksh)	Share of tot income (%)
Poor peasant households	-254	2,760	2,50	60.7
Middle peasant households	10,775	1,59	112,366	3.3
Rich peasant households	46,368	12,400	58,768	15.6
Capitalist farmers	137,907	136,148	274,055	72.6
'Part-time' farmers	1,099	28,746	29,846	7.9

Source: own survey

Table 6.15 also supports the view that capitalist farmers obtain the largest share of total income in the sample, although it must be stressed that among these two members obtain more than half of the income earned by this class. Nevertheless, the capitalist farmers realize the lion's share of wealth produced in the district.

Table 6.16. Frequency of jembe replacement (N=90)

Peasant stratum	Average time (years)	Used for land preparation (% of h.h.)
Poor peasant households	2.7	60.7
Middle peasant households	5.4	2.6
Rich peasant households	11.2	0.0
Capitalist farmers	-	0.0
'Part-time' farmers	4.8	11.1

Source: own survey

Figure 6.6. Farming intensity by peasant stratum in maize (measured in total labour days/ha.)

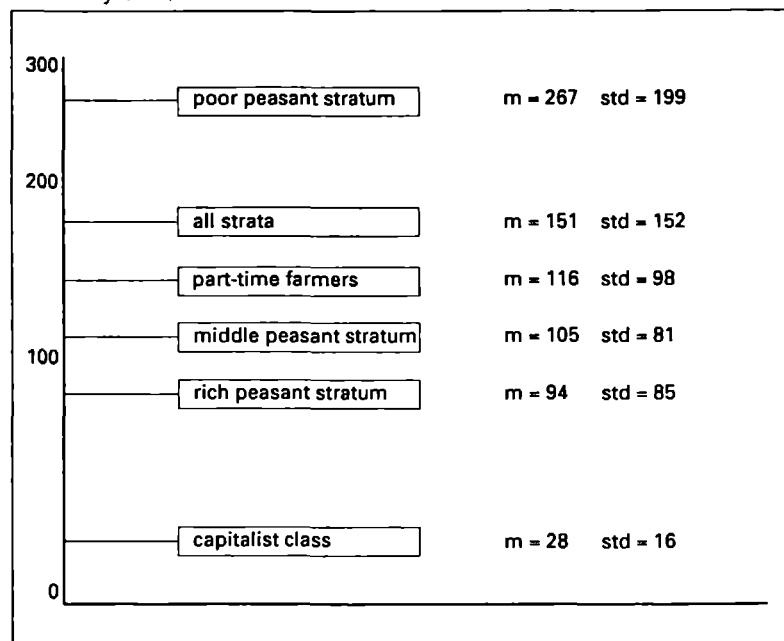


Table 6.16 hints at another crucial dimension to the reproduction crisis which faces the poor peasant stratum in the district. The jembe, the widely applied instrument of labour in maize farming, is primarily employed by poor

peasants. It is used for several purposes in the maize production process. Since the majority are not in the position to mechanize land preparation or to employ an ox plough, they rely heavily on the jembe as the instrument for land preparation and weeding. The immediate result is that the jembe does not last long and needs to be replaced almost every three years. This, too, is part of the reproduction crisis almost exclusively felt by the poor stratum.

Figure 6.6 shows plainly that every social stratum outlined different styles of farming.

6.8. Farming styles and rural differentiation: explaining heterogeneity

In order to get a clear picture of the overall trend for maize farming in Nandi, a multiple regression analysis was undertaken. Multiple regression facilitated the examination of the relevant variables discussed above in their mutual relationships. The results of the quantitative analysis are represented in a path-diagram.

This quantitative analysis appeared to be a comprehensive way of untangling the complexity of farming. More importantly, perhaps, it enabled us to assess the nature of the agricultural production patterns and to evaluate the contribution of Green Revolution-inspired technologies. It particularly facilitated an explanation as to why an enormous variation in maize yields were obtained within the sample area from hybrid maize technology. Both the state and the farmers' reason for the introduction and adoption of the hybrid maize package is to increase maize yields. Yield was therefore treated as the dependent variable in the equations.

The regression equations for the construction of a path-diagram were built up with the following *independent* variables which were put into several regression equations:²¹

(1) ecological setting, i.e., natural and physical conditions for agricultural production of the region (Table 5.3, Chapter 5). The ecological setting is similar to the location of the farm enterprise in an agro-ecological zone (i.e., here a sub-location) and rank-ordered according to maize yields;

(2) rural strata to emphasize social heterogeneity and the varying socio-economic preconditions for agricultural production (see section 6.7);

(3) the actual cultivation techniques applied in production (mode of preparation of land, seeding/fertilizing and weeding; Table 6.3). This variable expresses the increasing level of sophistication of the labour process for maize farming;

(4) the physical inputs to show the impact of the application of agricultural technology of maize production; i.e. the hybrid maize commodity package (hybrid seeds, fertilizers and pesticides measured in quantities per ha., Table 6.6);

(5) farming intensity measured in labour-days per ha. was put forward as an indicator of the farming styles of the agricultural population. Data from Table 6.4 were split into manual and mechanized labour days since they are incomparable. Both indicators of farming intensity were used in the equation;

(6) the formulation of the variable 'interaction' (i.e. farming intensity*physical inputs per ha.) is a statistical technique applied in order to gain insight into what occurs when both variables change at the same time. Theoretically, the interaction variable expresses the organization of the labour process on the farm structured by incorporation into the market.²²

Table 6.17 displays the correlation coefficients between these variables. The results of the various regression equations are presented in a path-diagram (Figure 6.7).

Table 6.17. Correlation coefficients for the variables in the regression equations (N=71)

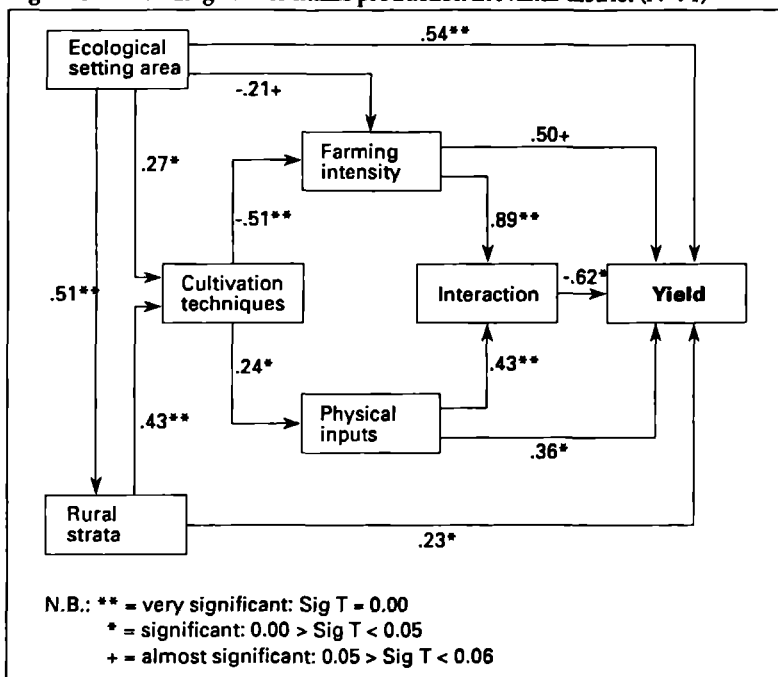
Variable	Variable					
	(2)	(3)	(4)	(5)	(6)	(7)
1. Farming intensity	-.46	-.61	-.47	-.41	-.10	+.85
2. Ecological setting		+.49	+.51	+.70	+.12	-.37
3. Cultivation techn.			+.57	+.38	+.24	-.47
4. Stratum				+.53	+.23	-.30
5. Yield					+.21	-.34
6. Physical inputs						+.35
7. Interaction (1*6)						1.0

The path-diagram contains only the statistically significant relations (i.e., sig. T. between 0.00 and 0.06, ranging from very significant to almost significant). From the path-diagram we can draw the following conclusions.

1) The direct effect of the natural conditions (ecology setting) on farming is beyond any doubt (+.54). The existing variety in ecological conditions explains to a great extent the exhibited variance in yields per hectare. In the ecologically suitable areas hybrid maize performs much better. This is the so-called ecological bias detected in many critical appraisals of Green-Revolution inspired agricultural modernization programmes in Third World countries.

2) The effect of rural 'stratum' on yields is +.22. As farmers occupy better socio-economic positions, they succeed in realizing higher yields. This points at the socio-economic bias in the new maize technology. Strictly speaking hybrid maize technology is designed as 'scale neutral': a large/rich farmer purchases (for instance) ten 25kg-bags maize seeds and 25 25kg-bags of fertilizer while the poor/small farmer buys (for instance) one 10kg-bag of seed and one 25kg-bag of fertilizer. In the fields, however, we witness a clear bias in favour of rich farmers (who happen to operate holdings in the better areas as indicated by the +.51 score between 'stratum' and 'ecological setting'). Rich farmers have access to capital and are able to purchase the necessary inputs at the right time and more, importantly, because they are in a position to mechanise maize farming, they are able to employ the inputs at the correct time. Poor farmers, on the other hand, have fewer monetary resources and depend mainly on household labour to resolve problems of labour peaks. The efficient use of hybrid maize technology, in terms of reaching the technological optimum, is reserved for and attained by the richer farmers (as indicated by the +.43 score between 'stratum' and 'cultivation techniques'). The factor technology serves in this respect as an element widening the gap between rich and poor.

Figure 6.7. Path-diagram for maize production in Nandi district (N=71)



3) The direct and strong relationship/correlation in the path-diagram between 'ecological setting' and 'rural stratum' suggests that the new maize technology did not force a break-through in the immediate dependency of farming on climate, soils and socio-economic differences. Both variables remain predominant explanatory factors in the variance of yields. Within this general pattern we see however a specific influence on yield of two other variables. 'Farming intensity' and the quantity of 'physical inputs' applied per ha. of maize have a direct, positive effect on yield (+.50 and +.35 respectively). This implies, that as labour input per ha. increases, yield will increase too. The same applies to the application of the commodity package. Both statistical relations reflect two prevailing farming strategies in Nandi district. Some farmers try to increase yields by increased manual labour input (more time for land preparation, better and more intensive weeding), while others rely on the offered technology (more seeds, fertilizer and herbicides per ha.) and means to mechanize farming. These are divergent strategies which ultimately result in divergent patterns of agricultural development.

A crucial (theoretical and practical) question is, of course, whether both strategies reinforce or exclude each other in practice. The aim of state agricultural policy is to foster an agricultural development pattern which is based on improving the quantity and quality of farm labour (see Chapter 3). Technology development and innovation are founded upon the desire to offer

implements (tractors, planters) and objects of labour (improved seeds, fertilizer, etc.) which will fit in with the farming practice of the agricultural population whose farming strategy, in its turn, is based on intensification and supported by the quantity and quality of their labour. The outcome (in theory) will be an attractive agricultural development pattern: higher yields and more productive employment in the agricultural sector. But how did this theory work out in the fields? The path-diagram gives the following answers.

It can be concluded from the fact that the 'interaction' between farming intensity and physical inputs has a strong negative correlation with yield (-.62) that strategies founded upon high inputs of both labour and physical input and those based on low labour input in combination with low physical inputs effect yields negatively. In other words, both variables appear to be *mutually exclusive*. An interpretation of this negative correlation points at two *opposite* farming strategies of the farmers in the sample:

- one of low labour input in combination with high physical inputs positively affecting yield, in other words, a trend towards mechanization (labour saving agricultural technologies) and extensive agricultural practices (see the -.51 score between 'techniques' and 'intensity'). This indicates, as already mentioned, the drive towards mechanization and economizing on labour. This strategy is predominant in the better ecological areas and on holdings owned by the richer farmers. This is indicated by the positive correlation coefficients between 'ecological setting' and 'stratum' with 'techniques' (+.27 and +.43 respectively);

- another of high labour input (household, wage labour as well as exchange labour) in combination with low inputs positively affecting yield, i.e., a trend towards intensification of labour in farming practices. This strategy will be found in the small, and probably also the middle, holding size categories where family labour is the predominant form of labour.

The explanation of both farming strategies is rooted in the socio-economic position of the individual farmer. What is designed in theory does not result in the fields: farmers do not operate according to the assumptions of policy makers and scientists. In this specific case of maize production, and probably also in other crops and countries, rich farmers apply the offered technological package to realize higher yields with low labour inputs. Not only will their profits be higher, but they will also have fewer difficulties in mobilizing labour. Poor farmers, on the contrary, designed another strategy: an increase of family labour in order to increase yields.²³ In other words, the increase of labour input in combination with new technological opportunities (the quantity and quality aspects of agricultural policy in Kenya) appear incompatible with each other in practice, in the fields.

One clear aspect of this is 'cultivation techniques' in general and particularly the role of the tractor. One of the independent variables in the equation was originally 'machinable labour days per ha.'. The variable did not score a clear significant relation with yield or any other variable in the regression equation. The following conclusion seems therefore appropriate: mechanization of farm tasks (ploughing, sowing, spraying) is not applied for reasons of good ploughing or sowing/fertilizing in order to produce high yields. The real intention appears to be to reach the technological optimum of agricultural technologies (e.g., the optimum time for planting) with the effect

of substituting labour. An entrepreneur will qualify this as efficient use of scarce resources.

The positive relation between 'techniques' and 'physical inputs' (+.24) suggests that as more farm tasks are mechanized, the more physical inputs are applied. The result is a coherent pattern: a combination of mechanical and biochemical technologies which have labour- and land saving effects, leaving the opportunities for substantial increases in yields and productive employment largely under-utilized. Another indicator of the under-utilization of farm labour is that, increasingly, a poor farmer's labour is productively employed outside his/her farm, in urban and/or rural wage-employment and in self-employed business ventures. This trend for farmers' labour to be employed away from the farm is observable all over Kenya (Chapter 4) and is compulsory because straddling agricultural production and off-farm work is necessary for many poor households to protect the means of reproduction of farm and household.

A critical question now is what the precise impact of the adoption of the Green Revolution commodity package on maize yields is. The technical inter-relations shown in the path-diagram reveal that the direct effect of 'physical inputs' on yield is +.35. The indirect effect (via the interaction variable) is negative: $(-.62 \times .43 =) -.26$. The total effect of the new technology for maize farming is thus: $+.35 - .26 = +.09$. This is a very modest effect given the amounts of capital and manpower invested in the hybridization of maize (see Chapter 7). The potential effects on yields per ha. (and with that an increase in national maize production) are nullified by the simultaneous reduction in labour input. In this way, the new technology has all together a very modest effect on agrarian growth (in the physical sense) and a negative impact on agrarian development: the rich and capitalist farmers realize substantial profits from maize farming by reducing labour input.

6. 9. Conclusions

The analysis indicates two important trends in development in Nandi district. The 'agrarian revolution' has encompassed virtually all the agricultural population in the district. This is particularly evident when we compare the 1987 survey with the 1963/64 survey (Chapter 5). Although the latter covered fewer farms and households than the former, the conclusion is accurate. The Nandi-survey data highlighted in detail that the historical process of commoditization coincides with the concentration in a few hands of wealth generated from agricultural production and from other sectors of the economy. This conclusion was already drawn in the previous chapter but based on less systematic data. The Nandi-survey allows the following conclusions.

In the first place, the finding support the notion, presented in Chapter 4 which addressed the rhythms of agrarian change in Kenya, that rural development can be characterized by a process of (increasing) rural socio-economic inequalities. A capitalist land market and individual land tenure has developed in the district which was accompanied by a deeply rooted and widespread process of commoditization. Production and reproduction of farm and household is conditioned for a large sector of the population by the working of market forces. As is shown in this chapter, the emphasis of state agricultural policy on hybridization of maize and the adoption of an

associated package of bio-chemical inputs directed more and more households into commodity production.

In the second place, the survey verified the fact that the Nandi peasantry is divided into groups and strata whose life is defined by different social relations and material conditions. The question as to whether the dynamics of the expansion of commodity production in Nandi district did lead towards the preponderance of the middle peasantry as is the case in Central Province (Cowen 1974, 1981) cannot be answered entirely. Surveys conducted earlier were too limited in sample size and could not serve as a basis for comparison. What the survey tends to confirm is that the Nandi peasantry is not split into classes as suggested by Leninist frameworks. The middle peasantry in Nandi survived as a unit of production in commodity circuits. On either side of the middle peasantry, the survey indicated the existence of a rich peasant stratum and capitalist farmers on the one hand, and a poor farmer stratum on the other.

The survey also confirmed that the rich peasant stratum and capitalist farmers receive the bulk of income from agricultural production, from non-agricultural business and from civil service jobs. Some of them are able to buy large tracts of prime agricultural land in neighbouring districts (Trans Nzoia, Uasin Gishu) where they plant profitable crops like wheat and maize on a large scale. The survey also delineated a poor peasant stratum which cannot afford to supplement family labour with hired labour to avoid the bottle-necks of agricultural labour peaks seasons in digging, planting, weeding and harvesting. On the contrary, they have to earn an additional cash income in order to buy food and inputs, simply because their resource base is too small. The only option they have is to borrow money and/or to rely on remittances from family members and/or to seek employment. For some of them, the only way to earn cash is to enter unequal relationships with the richer strata of the peasantry; i.e., during periods when their presence on their own farm is urgently required. Therefore, their agricultural performance will be poor, and the yield will be insufficient to provide food for the household, except for a few months. They have a tough job in Nandi district where casual and seasonal agricultural work is rewarded with Ksh 5-10 for a 6-8 hours work day. Even employment on a large farm results in a payment of Ksh 20 per day on a no work no pay basis and Ksh 400 per month for a permanently employed worker. In addition, the poorer families in particular suffer from the price squeeze of increasing input costs for seed and fertilizers and the more or less steady prices for farm output.

In the third place, the survey established the specific nature of institutionalization and state intervention in Nandi district. The promotion of expansion of commodity production expansion may be perceived as the rationale behind state intervention in the agricultural economy of Nandi district. State investment in hybrid maize farming, graded dairy farming and napier grass improvement schemes are the imperative ingredients of state policy to reach that aim. Both the Annual Reports of the DAO (Chapter 5, section 5.2.5) and the 1987 survey indicated that the opportunities to expand as well as to capitalize commodity production were actively incorporated into the farming strategies of the Nandi agricultural population, but state endeavours to support and expand commodity production appear to be biased in favour of the rich peasantry and capitalist farmers. Policy bias, as reflected in the

differentiated linkages between the state and the farming population, must be seen in two broad perspectives. State practice in credit and extension services is based on privileged access by a minority of the farming population. The distribution of state services, and thus the benefits of commoditization among the agricultural population in Nandi district, does not differ from the national perspective which will be examined in the following chapter.

Policy bias can also be elucidated by the specific choice of hybrid maize technology to increase maize production in the country. The overall effect of hybridization of maize production on yields in Nandi district, i.e., the technological core of state food policy, was shown to be rather modest. The two variables with the largest impact on yield (i.e., with the largest explanatory power for the variation in maize yields) are 'ecology' and socio-economic position. State intervention in agriculture based on policies centred around new technologies in concrete settings like Nandi district manifested three significant trends.

First of all, it resulted in a trend toward enrichment for capitalist and rich farmers, relative wealth for the middle peasant stratum and impoverishment for the poorer sectors of the peasantry. Hybrid maize production appeared to be highly profitable and very well suited to the richer sections of the farming population. They were able to design a farming strategy based on capitalization of production: the employment of wage labour and the application of modern technology with a labour-substituting effect. This technology-centred strategy appeared to be productive and profitable and created conditions for capitalist production: the production for surplus value in agriculture. Hybrid maize also created, however, a foundation for a manual-labour centred farming strategy, a strategy based on an increase of family and manual labour input in order to produce high yields. This strategy, like the technology-centred farming strategy, is a function of the quality and quantity of farm labour.

Secondly, hybrid maize production increased the pressing need to 'straddle'. The need to straddle agricultural production and off-farm work is particularly felt by the poor peasant stratum. Their land base is too small. Specifically we find that 1.5 ha. is the critical limit for a land base to sustain subsistence production in Nandi district. Households with holding sizes below this limit can only survive by straddling. What was invented with a notion of scale neutrality appears in the fields and on the farms as discriminatory and an element in the process which widens the gap between poor and rich. Seen in this perspective, we can also question or at least have serious doubts, about the impact of the smallholder dairy development programme in the long run.

Thirdly, the ecological bias in hybrid maize technology clearly supports the argument put forward in Chapter 4 that agrarian policies in Kenya are based on, and directed towards, medium and high potential farming areas. Agricultural policy-formulating institutions in Kenya take natural and ecological conditions, and thus the differences between regions, as given in policy making and implementation.

The Nandi survey supports the assumption worked out in Chapter 1, section 1.3.4. that commoditization and institutionalization, governed by the state, acquired a selective character and thereby reproduce heterogeneity in the district.

If we return to the policy making- and agricultural research design Table, the ultimate effect of the new technology is considerably different from what was probably envisaged, unless that effect was deliberately envisaged (see also Chapter 7). The task of technological innovation, if it was genuinely intended to help the poorest in rural society, was to get that labour power back on the farm. It did not succeed in this objective because the prerequisite of social security and a major rise in household income is land which the poor do not have. Moreover, the 'agrarian revolution' increasingly directs poor farmers' labour away from the farm. Even if, during the policy-making and implementation process, policy makers and agronomists abstract from the socio-economic and ecological structure, they inevitably appear to be influenced by that structure and by socio-economic interests who play a crucial role in that structure. Moreover, the fields differ considerably from the drawing table, and the farming population appears to be more than only passive receivers of new technologies.

The future is hard to assess. Differentiation of the agricultural population will continue. Access to land, labour, implements and off-farm income will remain determining factors in that process. Land in Nandi district is hardly available any longer at reasonable prices and, therefore is not affordable by the poorer households. Population growth and the culture of sons inheriting fathers' land will step up fragmentation of land holdings and population pressure on land. As a result, more cheap, but not necessarily free labour, will be available for the rich peasant stratum and capitalist farmers to employ on their farms. The opportunities for the poorer households to seek alternative sources of income off the farm are slim since there are no real alternatives in either inside or outside the district, in sectors of the economy other than agriculture. The future is also bleak in this respect and will depend largely on the effect of future state intervention in agriculture which aims to improve the living conditions of certain identified 'target groups'.

Notes

¹ For a detailed discussion on the difficulties of defining households in the African context, see Guyer (1981).

² See, for instance, Carlsen (1980) and Lavnjens (1984). See also IRS-I, II, III and IV.

³ Family labour is treated here as equivalent of household labour.

⁴ Exceptions to this rule can be found in households straddling agricultural production and non-agricultural work. In most cases this means that the tasks of the off-farm income earner (in many cases the man) are performed by hired labour.

⁵ Ownership of such machines is thus a clear indicator of class status.

⁶ A factor which may explain that ox ploughs, although relatively cheap, are not widely used is that after a long and dry season the oxen are generally too weak to do heavy work on the land.

⁷ The following table incorporates data on the extent of commoditization of maize farming in the sample area: Share of HYV-package and labour costs of total production costs for maize farming in the sample

Physical inputs	% of total input cost (a)	% of total prod. costs (a+b)
Seeds	26.7	12.0
Fertilizers	67.8	30.3
D D T	0.3	0.1
Pesticides	5.2	2.3
Sub-total	100.0	44.8

Labour costs	% of total labour costs (b)	
Land preparation		
manual	2.4	13
ox ploughing	0.1	0.0
tractor hire	40.5	22.3
Sowing/fertilizing:		
manual	17.4	4.0
planter	3.9	2.1
Dusting	0.1	0.1
Weeding:		
manual	19.3	10.6
spraying	0.8	0.4
Harvesting	25.6	14.0
Subtotal	100.1	55.2
Overall total		100.0

Capitalization, i.e., incorporation into the market for seeds and fertilizers, necessarily entails increases in costs connected with the purchase of these inputs. Apart from the production cost of inputs attached to hybrid maize production, transport costs appear as an extra expenditure which are felt more by small farmers than by large farmers. On the one hand, the small farmer is confronted with an increase in his/her production costs in the form of an extra and relatively large amount of transport costs, i.e., when inputs purchased through middle men, the stockists in the market place pass on their transport costs to the buyer. On the other hand, transport costs represent only a small proportion of total production costs, in particular for those owning means of transport.

8 Some resource-poor farmers were asked why they adopted hybrid maize production when it increased production costs considerably and implied a more market-oriented farming strategy. A simple comparison between growing local maize varieties (involving less or almost nil costs in cash terms) and hybrid maize made them nervous and no answer was given. Probably they did not expect such a question from an *mzungu* (foreigner) who in their eyes brought that particular technology. A question from such a person, asking why they had not continued to grow local varieties instead of adopting 'his' modern technology, could not be reasoned out by them.

9 These dairy farms are quite similar to the famous Dutch vanguard dairy farms. They differ in that wage labour is a central element in their mode of operation, while the Dutch dairy farm is merely based on family labour.

10 The recommendation in the DDP to extend napier grass is based on an average Project farm size of 2.8 ha. Farm sizes in the project vary, however, from 2 ha (in Kiambu, Meru) and 2.8 ha (in Kericho) to 5.2 ha (in South Nyanza and Kilifi). Napier acreage ranges in turn from 0.5 ha (Kiambu) to 0.8 ha (Kericho, Kilifi). These qualifications do not correspond to the farm sizes of many smallholders in the sample. See Dairy Development Programme/3rd Joint Kenya/Netherlands Evaluation Mission, May 1986, p. 33.

11 Ibid., p. 11.

12 Access to agricultural credit and credit-worthiness appears to be a crucial way of purchasing means of production which, in turn, serve as the basis for an off-farm venture. The tractor is an attractive investment in this respect. This pattern appears particularly relevant for some of the large landowners in the sample.

13 It is obvious that this picture of unequal distribution of agricultural income emerges also at the sub-location level, in the sense that Kapkangani and Mosombor are the poorer sub-locations (i.e. with a small land base), while Ndulele and Ndalat can be labelled as rich sub-locations.

14 Privileged access to credit for middle peasants is one way to become a rich peasant. Credit opens up the possibility of purchasing a tractor which they also use for hiring out purposes and thus is a means to augment their income and/or to accumulate capital from this source. Access to credit must therefore be part of our analysis of the differentiation of the peasantry.

15 The following selection criteria are employed by the Standard Chartered Bank Kenya Ltd, Kapsabet branch: 1) the farmer must already be a client (i.e., have a bank account), 2) must

have a clean record, 3) must have the ability to repay (depending on the farm operations, the intended projects and the size of the holding), 4) the bank demands security in the form of land title deeds. Interview with general manager, 15th October, 1987

16 The AFC-Kapsabet office in Nandi works with an assigned budget. The bulldozing practice could imply that only a small portion of this budget is available for small farmers (AFC-Kapsabet interview)

17 In an interview with the service in Kapsabet, the severity of this bias was discerned. 'We are working on it'

18 Measuring the relation between holding size and the quantity of inputs applied did not reveal a significant relation

19 At the time of the survey, the NCPB still operated within a monopoly situation. In 1989, however, the state abolished the NCPB monopoly position and made more room for private traders.

20 The lucky or coincidental situation occurred that one of the migrant labourer farmers who was part of our survey worked in a hotel in Narok where I stayed. Discussions with him convinced me that, at least in his case, he preferred to work for some years somewhere else in order to save money to be invested later in agriculture.

21 In the regression equation $yield = f(\text{ecological setting, rural stratum, cultivation techniques, farming intensity, physical inputs, interaction [=farming intensity * physical inputs]})$. The independent variables for the explanation of the variation in yields, as well as the quantity, ecological setting, cultivation techniques and physical inputs are also derived from Gerhart (1976) and Allan (1970), the variable rural stratum was derived from the critical Green Revolution literature (see also Griffin (1979), Pearce (1978, 1980), Galli (1981), Lawrence (1988) and Glaeser (1987), the variable farming intensity and the interaction term [farming intensity*physical inputs] is derived from Bolhuis & van der Ploeg (1985).

22 See Bolhuis & van der Ploeg (1985) and van der Ploeg (1987).

23 This in its turn raises the crucial question of gender relations in agricultural production. Although the survey was primarily meant to examine patterns of agricultural development at farm enterprise level, the gathered data (not processed in this book) on sexual division of labour in production suggests the hypothesis that poor households survive by increasing the input of family labour and particularly of female and child labour.

CHAPTER 7

THE NATURE OF STATE INTERVENTION IN AGRICULTURE: THE CASE OF THE NATIONAL FOOD POLICY

Introduction

The previous chapters outlined the general objectives of state intervention. Various instruments and institutions were created in the past and/or only recently to reach these objectives. Chapter 3 also indicated some of the problems of implementation. The Development Plans and the National Food Policy Paper in particular underlined some of the problems of marketing inefficiency in maize and the bleak prospects for a breakthrough in agricultural R&D and dissemination of research results.

Chapter 4 brought forward the characteristics of Kenya's agrarian structure. On the one hand, estate, capitalist production and a resilient peasantry both play an enormously important role in accumulation. On the other hand, we find regional and socio-economic differentiation as a result of the specific impact of commoditization. Chapters 5 and 6 showed how these features were formed in the regional context. These chapters also demonstrated that the combination of commoditization and institutionalization, which almost logically accompany each other, is one of the mechanisms which strengthened social heterogeneity in the agricultural sector.

The present chapter is designed to examine the institutional aspects of state intervention on the national level. This brings us automatically to the issue of the effectiveness of state interventions. To what extent are the instruments for intervention attuned to the reality of farming and the needs of the farming population? The examination will concentrate on an evaluation of Kenya's National Food Policy (see Chapter 3, section 3.2.2. for an overview of the policy outlines). This chapter deals, therefore, first of all with the technological components of the National Food Policy and the claimed achievements of the effect of technology transfer to the agriculture sector. A particularly illustrative case of the transfer of technology to agriculture is provided by the introduction of hybrid maize. Simultaneously, we shall how the state established the technological and administrative backbone of an hybrid-maize-oriented structure. The diffusion of hybrid maize in Kenya is considered as a unique success story in Africa.

Secondly, we shall examine the politico-administrative components of the National Food Policy in the broader context: marketing arrangements, the pricing of production and consumption goods and the role played by the agro-institutions (research, extension and credit) in the implementation of agricultural policies.

An additional but equally important aspect of state intervention is related to its macro-economic objectives: managing the huge deficits on the state's balance of payments account. To what extent is the pursuit of this objective detrimental to the related objective of maximising commodity production for

the international and national markets ?. Are the instruments for attaining this objective the proper instruments or only inefficient instruments ?

7.1. Hybridization of maize

Around 1963, Kenya's estate producers yielded an excess over domestic demand of maize. World market prices were, however, low at that time and considerable losses were faced. The area under maize cultivation in the large farm sector dropped by 50 %. Smallholder deliveries to the Maize and Produce Board dropped by 60 %. A government commission advised the production of maize solely for the home market until a widespread use of improved seeds and better husbandry practices could bring down costs and close the gap between producer and international prices. The following year, the introduction of a new, improved and higher yielding seed variety would begin to bring these recommendations about.¹

The role of the Kenya Seed Company (KSC) and the agricultural research system, notably the Maize Research Institute in Kitale and Katumani Maize Research Institute, has been aired frequently.² The first hybrid seeds were produced and sold in the early 1960s.³ The initial objective was to concentrate on large-scale farmers under the *a priori* theorization that the small farmers could not cope with the agronomic requirements of hybrid maize seed. The KSC however, together with the state, mounted an aggressive campaign to involve small-scale farmers. Together with MOALD, the extension service, distributors of seeds and fertilizers (KFA [later KGGCU] and local traders), KSC accomplished the fast adoption of hybrid maize by smallholders and estate producers.⁴

By 1966, over half of the large-scale farmers in Kenya used hybrids, but by 1967 more than half of the hybrid maize seeds were sold to small farmers. Since 1968, the area planted with hybrid maize in smallholder agriculture has exceeded the hybrid-maize cultivated area in the large farm sector. It is estimated that, for the year 1974, half of all maize farmers in the high potential areas used hybrids. The KSC estimates that about half of Kenya's 1.2 million ha. maize acreage is planted with hybrid or improved maize seeds. Gerhart's (1976) research revealed that by 1975 virtually all farmers in favourable climatic zones planted hybrid maize seeds. There is not a great divergence due to farm size in these zones.⁵ The KSC reckoned that since 1967 nearly every large farmer has used hybrids, and that in certain traditional large-farm areas, such as Trans Nzoia and Uasin Gishu districts, the use of hybrids approaches 99 %.

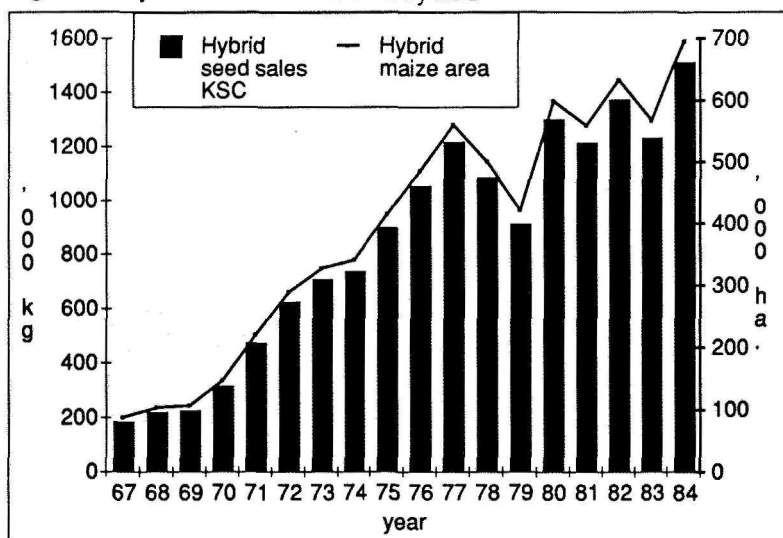
Analysis, such as Gerhart's and Chapter 6, has shown that holding size played no significant role in adoption of hybrid maize technology. Other factors, such as credit, access to cash money and education or extension service, also played a minor role in the adoption process. Gerhart did not exclude, however, that on the one hand access by a farmer to off-farm income increased the possibility of adoption or, on the other hand, that the nature of off-farm employment influenced the adoption process. What seemed to be important were, according to Gerhart and confirmed by the Nandi survey, the clear economic returns obtained from using hybrid seeds.

The availability of seeds through a dense network of suppliers and traders also contributed much to the fast adoption of hybrids. The KSC itself put much effort into their introduction. KSC changed considerably its packaging policy

for seeds. In the beginning, KSC only sold seed in 25 kg bags. It was proved that smallholders in particular found this too large and thus too expensive. The use of hybrids increased considerably when KSC issued 10 kg and 2 kg bags of seed maize. The 10 kg bag, which is sufficient for one acre of maize according to the KSC and the extension service, nowadays represents the lion's share of maize sales: i.e. 70 %, while 10 % for 25 kg bags and 20 % for 2 kg bags.⁶

The success of state policy geared towards hybridization of maize can (albeit only partly) be shown by the estimated increase in hybrid maize cultivated area and by hybrid maize sales from KSC (Figure 7.1. and Tables 7.1. and 7.2) and by the sales of maize to marketing board and imports (Figure 7.1). The trend represented in Figure 7.1 shows clearly that both the total improved maize area (hybrids and the open pollinated 'Katumani' varieties) and maize seed sales by KSC are increasing almost every year. The following tables show however a regional variation in uptake of hybrid maize.

Figure 7.1. Hybrid maize area and sales by KSC



The availability of certain types of hybrids - KSC produces at the moment 9 different type of hybrids and two open pollinated varieties) - for certain zones influence the geographical pattern of uptake. Data from MOALD show that the use of hybrids among smallholders varies widely by regions.⁷ Tables 7.1 and 7.2. indicate both the regional different pattern of hybrid maize adoption and the degree to which hybrid maize replaced the local production and distribution systems of local maize varieties in Kenya. Chapter 6 showed that this replacement process was complete in Nandi district.

Table 7.1. Percentage smallholders growing local and hybrid maize varieties, 1974/75

Province	Local maize	Hybrid maize
Nyanza	80	36
Western	74	73
Rift Valley	59	92
Central	95	67
Eastern	99	30
Coast	94	19
Kenya	86	50

Note: the totals exceed 100 % because most farmers grow both local and hybrid maize varieties

Source: IRS-I, chapter 9, various tables.

Table 7.2. Maize planted with hybrid seed as a proportion of total maize area, by province, 1981/82

Province	Area hybrid maize	Share of total maize seed sales
Nyanza	55	18
Western	37	13
Rift Valley	88	53
Central	70	13
Eastern	5	3
Coast	7	1

Source: AIR/World Bank (1985), Vol. 1. Main Report, chapter III, p. 3.

The adoption of hybrid maize might be somewhat greater than Table 7.2 and figure 7.1 show. The acreage is expected to be greater since many farmers use less than the recommended level of seed per ha. The estimates are based on the sales of hybrid seeds by branches of KFA/KGGCU. For the calculation of hybrid-maize cultivated area it is assumed that every 10 kg is sufficient for 0.4 hectare, and the 25 kg bags, for 1 hectare. The hybrid maize land-use data should therefore be treated with some caution.⁸

Figure 7.1 does not display data on fertilizer uptake in maize production. Overall fertilizer application increased considerably since independence as is shown in Figure 4.3 of Chapter 4. The reason for the omission of fertilizer application in Figure 7.1 is that clear data revealing the rate of fertilizer application for maize are not widely available. The data that are available are only based on estimates. These are, in their turn, more or less based on the recommendation of research stations and of the extension service (i.e. 25 kg/ha).

The IRS surveys (I, II, III and IV) indicate low and varying levels of fertilizer application in most districts (lower than recommended).⁹ Between districts there is an even greater variation in fertilizer use on maize. Levels in Trans Nzoia (a prominent maize-estate district) are over 40 times the levels of use in Kisii and the rest of Nyanza Province (mainly small-scale farming area). Levels of use in Nandi and Kericho are less than a quarter of levels in Trans

Nzoia and Uasin Gishu district. Rift Valley Province as a whole, with 50 % of the country's total maize area, consumes 70 % of all fertilizers applied to maize. Nyanza Province with 16 % of the total maize area, consumes only 3 % of fertilizers used on maize.¹⁰

The regional variation in uptake may be related to the different resources for maize farming between large and small-scale farmers. The long history of large-scale farming in Trans Nzoia and Uasin Gishu and possibly also the extension impact of KSC (located in Kitale, in Trans Nzoia district) a crucial factor in these areas is.¹¹ The greater number of suppliers and stockists in the large-scale farm areas, the lack of available supplies to smallholders in smaller packages and the absence of extension services to small-scale farmers, may also contribute to higher levels of use in large farm areas.

The state decided to stimulate fertilizer uptake by subsidizing purchase prices. The subsidies comprised, depending on the type of fertilizer used, a generous subvention ranging between 4.4 and 14 % of the retail price. The Havelock Committee Report of 1971 revealed, however, that 80 % of the value of these subsidies went to estates and large farms. The subsidies on fertilizer purchase prices were subsequently gradually cut and completely withdrawn in the late 1970s.¹² Apart from subsidies, various smallholder credit schemes, such as the Fertilizer Import Supply Scheme (FISS), were created to boost fertilizer application among small-scale farmers. These programmes were not successful, however, and levels of repayment were extremely low.¹³

7.1.1. Claims of success of hybridization

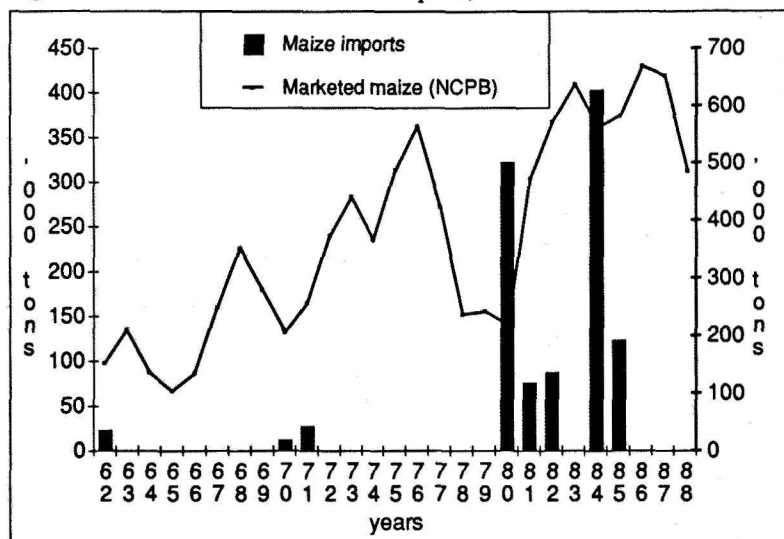
The claims for the achievements of the technology transfer programme are made on various grounds. The claims range from an increased marketed output to productivity increases and increased economic benefits for the farmers.

Figure 7.2 displays the marketed proportion of maize as increasing substantially since the 1960s. Commercial imports were necessary, however, in some years. In addition, maize imports obtained through emergency food aid or loans and grants (such as the US maize disposal programme known as the PL480 programme) were vital to supply the nation with food.¹⁴ The data on food aid are not included in Figure 7.2. Periods of severe drought which the country experienced in a.o. 1965, 1976, 1979 and 1984 are, however, only one factor causing the variation in marketed output. The politico-economic facts underlying maize marketing and pricing, which are part of the explanation, will be discussed further on in this chapter.

Data on productivity and yields in hybrid maize production are available but of little use for comparison and analysis. First of all, yields vary per hybrid maize variety planted. The *expected* yields for H613, for instance, is calculated at 5,400 kg/ha; for H625 at 7,200 kg/ha and for H512 at 5,400 kg/ha.¹⁵ Besides that, the available productivity and yield figures are mostly obtained from trials in certain areas and in the main not based on conditions of production which can be found on small farms. The MOALD figures for productivity and yields are therefore misleading and furthermore based on limited surveys only.¹⁶

The available data on average maize yields for the period 1975-1979 show a substantial variation between agricultural zones and districts. The data are

Figure 7.2. Marketed maize and maize imports, 1962 - 1988



Source: Statistical Abstract 1965 - 1989

presented, as usual, differentiating between small farms and large farms. In small farm districts, the average yields range from the lowest recorded yield of 1,036 kg/ha. in Kitui district to the highest recorded yield of 4,967 kg/ha in Kericho district. In the large farm sector, yields ranged from 2,223 kg/ha. in Laikipia district to 3,970 kg/ha. in Trans Nzoia district.¹⁷

In Chapter 6, we went beyond this resource distinction and related the enormous variation in maize yields observed in Nandi district to varying ecological and socio-economic conditions as well the varying farming intensity and the organization of the labour process in maize farming.

With financial and technical assistance from the Netherlands government, the National Seed Quality Control Service (NSQCS) was established. The main task of the NSQCS was to ensure that only high quality seed of adapted varieties would reach the farmers. The NSQCS became responsible for controlling maize seed production, seed testing and quality control.¹⁸ The NSQCS claims, that due to its activities in maize seed control and certification, production increased substantially. It is argued that as a result of better (i.e. certified) hybrid seed, maize production increased by 57 kg/ha. The estimated increase in the net income of the target-group (primarily small-scale farmers)¹⁹ is about Ksh 88/- per acre of maize. They assume that the small-scale farmer cultivates maize on an average plot of 0.25 ha. The direct net income benefits for the smallholder is calculated at Ksh 22/-. Furthermore, it is assumed in the project evaluation report that 2 million farmers belonging to the target-group have been reached directly, while approx. 10 million farmers have been reached indirectly.²⁰

Generally, the impact of hybridization of maize is appraised as positive. Gerhart (1976) concludes that

'(...) although it is the combined package of practices (i.e., time of planting, good husbandry methods, p.f.) that produces the most dramatic results, the use of hybrid seeds alone will raise yields substantially, probably as much as 50 % under good conditions.'²¹

Trials indicated that hybrids planted under 'traditional' husbandry conditions increased production by 35 %, while hybrids plus improved husbandry and fertilizer application raised returns by 300 % or even more.²²

The famous 'Dr. Allan trials' carried out in Kitale in the mid-1960s quantified the impact of improved cultivation techniques on yields as follows:²³

Poor Husbandry: local maize no fertilizer = yield 2,000 kg/ha. Poor Husbandry: hybrid maize with fertilizer = yield 3,318 kg/ha. Good Husbandry: local maize no fertilizer = yield 4,954 kg/ha. Good Husbandry: hybrid maize with fertilizer = yield 8,136 kg/ha.
--

The trials also showed that apart from fertilizer application, the time of planting is crucial for obtaining the higher yields. The Kitale Research Station estimated that for Western Kenya only 50 % of the yield is obtained if sowing is delayed 2 weeks. 70-80 kg grain/ha. are lost for each day's delay after the first week of the rains. The time of planting crucial for reaching the inherent technological optimum of hybrid maize is greatly influenced by the availability of labour. In Chapter 6 we have argued that this may act as a constraint. These constraints were dealt with in different ways: intensification of manual household labour and/or an increased level of mechanization on the farm. The socio-economic position of the farmer was put forward as conditioning the way in which these constraints were circumvented.

It is not unreasonable, however, to believe that yields of maize have increased substantially. It is widely accepted in agronomic circles that yields from hybrid maize are approx. 30 % higher than from local maize varieties. This contributed undoubtedly to an increase in maize production and has resulted in Kenya becoming largely self-sufficient in maize. In some years it has been able to export maize to neighbouring countries. Only in years of severe droughts has maize to be imported (see Figure 7.2).

Gerhart (1976) summarizes the *indirect* effects of hybridization of maize on economic development in Kenya.²⁴ A greater availability of maize achieved through higher yielding varieties can also bring about increased regional specialization in crop production, with the highest potential areas switching increasingly from higher value crops such as tea, coffee and pyrethrum which can only be produced in limited ecological areas. Pastoralists and farmers in chronic food deficit areas benefitted indirectly through improved availability of maize, although black market operations, due to present day restrictions on private maize trade, increased prices and thus reduced the benefits. Gerhart furthermore mentions the positive employment effects in the commerce sector (distribution of production inputs) and in the input manufacturing industries (seed companies, local manufacturers of tools). In addition, hybrid maize is a more labour-intensive crop than traditional maize. The use of hybrid maize

thus increased the demand for wage labour in the rural areas. His overall conclusion is that 'a more beneficial case of investment in the production and distribution of new agricultural technology would be difficult to find.'²⁵

7.2. Institutional factors affecting the implementation of the National Food Policy

The following policy areas are considered as crucial: marketing efficiency and pricing policy as well as the nature of agricultural research and development, extension services and credit supply. All these issues are relevant aspects of Kenya's Nation Food Policy. The Nandi survey as well as surveys in other districts brought these issues of institutionalization and state intervention to the fore front. They will be examined here largely in the national context.

7.2.1. Marketing and maize marketing in particular

The extent of state intervention in marketing varies by commodity. The domestic marketing boards purchase a small proportion of the food crops. The export marketing boards purchase almost all export crops. Most of the boards have operated under monopoly pricing and marketing arrangements throughout their history. Nevertheless, the boards vary considerably in their degree of efficiency, management and financial status. The position of the marketing boards (and with them the marketing cooperatives which are licensed traders of these boards) is much debated, in parliament, around the countryside, in government and in donor circles.²⁶

The World Bank and the Ndegwa Commission reviewed the efficiency of the marketing boards in Kenya. Prices paid to producers, the speed of payments to producers, costs of operation and marketing efficiency in general were taken as a reflection of the functioning of the boards. The recommendations of the Ndegwa Commission are to reduce government investments in parastatals in general, to impose more financial control and closer supervision on parastatals by the central state apparatus and to improve the management of the parastatals involved in marketing agricultural produce. The obvious background to these recommendations is most certainly the attempts of the Moi government to increase the efficiency of state intervention and to control its expenditures. In the light of the recurrent deficits on its balance of payments accounts, this is not surprising.

Two facts brought forward by the World Bank review and the Ndegwa report are illustrative of marketing in Kenya. One is that the marketing boards of commodities for the internal market (i.e. maize, wheat, beans, sugar, rice, cotton, milk and meat) were identified as highly inefficient marketing institutions. Low producer prices, late payments and high costs of operations were responsible for this World Bank judgement.²⁷ Aside from the Maize and Produce Board, the Kenya Cooperative Creameries (KCC), Wheat Board, the Cotton Lint and Seed Marketing Board (CLSMB) and Kenya Meat Commission (KMC) were particularly singled out by the Ndegwa Commission as poor performers and misusers of public funds.

The practise of delayed payments in particular was singled out as serious evidence of malfunctioning. As a result of late payments farmers found themselves unable to repay debts to credit institutions. The political leadership of the country, President Moi and other national and district political leaders, therefore frequently command the various marketing bodies to pay farmers

the millions of shillings owing to them. Much of the reduction in marketed production of maize, cotton and sugar can be attributed to this practice. In 1986, the drop in sugar cane production was so severe that 40,000 tons had to be imported. The same occurred with cotton production in 1983. Delayed payments by the responsible marketing board was one of the major factors behind the drop in the marketed volume.

A second observation is that the state institutions involved in marketing export crops (i.e. notably the Coffee Board and Kenya Tea Development Authority who control smallholder marketed coffee and tea) were identified as efficient and profitable marketing boards. Export crops in general have thus been more thoroughly controlled. These crops escaped from the distortions created by the ineffective market intervention that is practised for marketed food crops and maize in particular.

The recommended merger of the Wheat and Maize and Produce Board into the NCPB was not an effective reorganization according to the World Bank. Many of the problems of the pre-merger period remained.²⁸

We shall review the maize marketing structure in Kenya below. The maize marketing arrangements (and price fixation) and the effectiveness of the controls have two components: the marketing monopoly position of the NCPB and farm-gate price fixation.

The responsible maize marketing board, NCPB, is severely criticized for its financial mismanagement and is considered as highly ineffective in its operations. This accusation is nothing new in Kenya's maize marketing and pricing history. Several government-installed commissions of enquiry for maize marketing in the past (in 1942, 1946, 1952, 1955, 1958, 1963, 1966, 1972 and 1983) recommended without exception - against all odds - some diminution of state involvement in the interests of lowering the price to the consumer, encouraging specialization of maize growing in the best areas and making the large black market redundant.²⁹

The maize marketing structure in Kenya is characterized by duality and this constitutes the nub of the problem. The state-controlled marketing board, NCPB, purchases not only a small proportion of total maize production in the country, but also a limited share of marketed maize volume. For the year 1988 it is estimated that the share of NCPB was 30 % of total maize production; 10 % is purchased by private traders and 60% is retained by the producers for home consumption.³⁰ NCPB's proportion of total marketed maize volume has been estimated to be 40-50 %.³¹ The state is not able to control the marketed volume as in the case of export commodities. The formal marketing system thus leaves a considerable part of the maize market to the operation of rural black markets.

Since the predecessor of the NCPB, the Maize Control, was established in 1943, maize marketing has tended to create seasonal and regional variations in the marketed volume of maize as well as in rural consumer prices. These variations were aggravated by the state policy of stringent food movement regulations and the state's inability to control food prices in rural (black) markets.³² Despite laws prohibiting the purchase and movement of food crops by unauthorized traders and in spite of the trading of food (maize, beans) in larger quantities than 2 bags of 90 kg being forbidden, illegal intra- and inter district marketing channels have always prospered.³³

The maize marketing system has a tendency to inhibit regional specialization of maize production. The marketing and pricing system has impeded production based on (natural) comparative advantage. In surplus areas, production is governed by the low NCPB price, while in deficit areas, production is influenced by the high NCPB price. This kind of control encourages production in high-cost marginal areas while discouraging production in low-cost productive areas. Add to this, the NCPB's practice of late payments to producers. Late planting of maize and possibly lower yields are often the negative results of NCPB's practice of late payment to producers.

Thus due to the marketing inefficiency of the NCPB there has been, in many occasions, a reduced supply of maize. Delay in exporting surpluses from the bumper harvest in 1978 has meant the NCPB could not purchase all the maize produced and the private market was unable to absorb the surpluses due to restrictions on the movement of maize. Farmers, large- and small-scale, responded immediately by reducing the area of maize planted for the market the following season. Figure 7.2 displays the resulting reduced offer to the NCPB clearly. Figure 7.3 showing the area under maize cultivation in the estate sector, confirms the declining trend in maize area during that particular period. Data on smallholder maize cultivated area are not widely available and are therefore not included.

In addition, to make matters worse, the NCPB lowered producer prices in 1979 by nearly 12 %. The abolition of the existing GMR-credit scheme, which guaranteed loan finance to enterprises at the time of planting, and the fact that fertilizers not being widely available that year, contributed too to an exceptionally low maize harvest and low marketed volume.³⁴ Consequently, maize imports increased substantially the following year, as is shown in Figure 7.2.

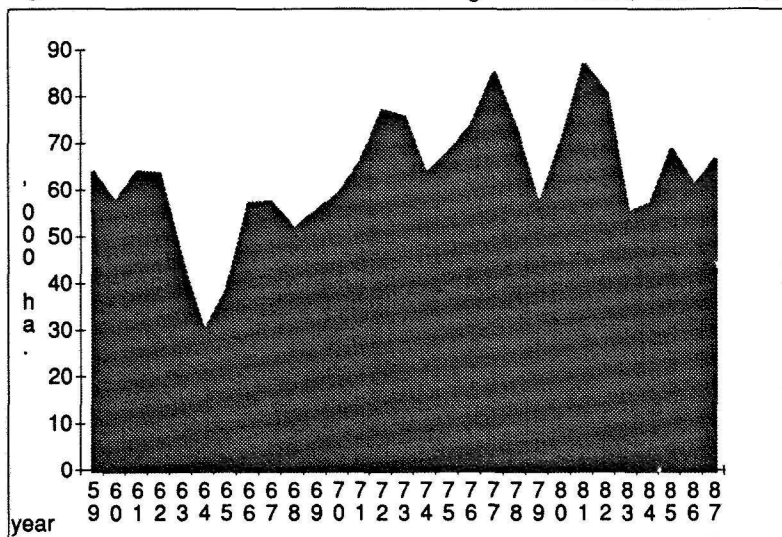
The recurring regional and local shortages of maize, even when national surpluses of maize exist, are reflections on the ineffectiveness of NCPB's control.³⁵ Not only is operational efficiency considered as very low, but the costs of transport and storage of maize and operating costs are increased unnecessarily as a result of controls that inhibit inexpensive collection.³⁶

Most costly, perhaps, for the small-scale commercial maize farmer are the restrictions on movements that force small-scale farmers to use less economical modes of transport and/or illegal channels. Furthermore, smallholders find it difficult to market maize through the NCPB as payments are commonly delayed. Nandi farmers stated that clearly. Small farmers, although not the Nandi farmers, prefer instead to sell maize to local private traders in spite of their prices being lower than the NCPB prices. Moreover, the officially gazetted price is available only at NCPB depots. Large-scale farmers, in contrast to smallholders, can ship in bulk and usually have direct access to NCPB depots.³⁷

The groups harmed by the maize market control system have been small-scale producers and consumers (who are often the same group) and, to a lesser extent, the urban poor. According to Peterson (1986), the maize market is a perfect example of the state's bias in favour of large farmers. There is no doubt that marketing policy regulations in general in Kenya discriminate against small-scale producers. Not only do smallholders receive a smaller return for their crops than large farmers, but they also pay a disproportionate amount of the administrative, storage, processing and transport costs.³⁸

For years the state maintained the same maize marketing system as originally initiated in 1942. This happened despite World Bank recommendations and despite various government working parties and inquiries on maize marketing to reorganize the system. The state's attitude

Figure 7.3. Area under maize in the large farm sector, 1959 - 1987



Source: Statistical Abstract 1965 - 1988

towards maize marketing has changed however. Kenya's leading donors, the World Bank and USAID, have exerted great pressure on the state to privatize food and other trade³⁹ and to eliminate the monopoly position of the NCPB in food marketing in particular. The World Bank, as Mosley puts it, 'attempted from outside the country, a feat of political muscle which had defeated all liberalizing elements from inside for over forty years.'⁴⁰

The World Bank found itself in a strong position to exert pressure on the state. The Bank directly coupled the advancement of a structural adjustment loan in 1982 to the restructuring of the maize marketing system. The Bank also managed to obtain support from various bilateral donors to take the same stance (such as the US and Britain); other donors, such as Sweden and the Netherlands, deplored this procedure and were not willing to cooperate in this operation. The Kenya government surrendered to the World Bank demands in 1983. The financial crisis of the state meant that it needed future loans from the World Bank and IMF, loan advances which were coupled to a restructuring of the maize market. In addition, all other bilateral donors now agreed to link aid expenditures to that objective.⁴¹ The government had to surrender and promised in 1983 to reorganize the maize market.

A foreign consultant, Bookers, undertook a review and recommended to the government in 1983 that a large part of the maize market should be taken out of the hands of the NCPB; the role of the NCPB would in the end be reduced to the role of buyer and seller of last resort from its strategic reserve of 900,000 tons.⁴² Only in 1986 did the government commence to reform the NCPB and eliminated its monopoly position in marketing. As a result, sales to the NCPB declined considerably and private traders increased their share in maize marketing. Deliveries to NCPB in 1988 are estimated at 485,300 tons; i.e. a drop of about 25 % from the previous year's figure of 651,900 tons.⁴³ See also Figure 7.2. The state, however, still retains control over the maize market by various institutions (OP and Treasury) through pricing.

7.2.2 Pricing policies

Fixation of consumer, producer, retail and processing prices is a second important element of state marketing policy. Pricing in the Kenyan context involves two main aspects. First of all, there is the fixation of prices of food (including maize) and other consumer goods versus producer prices of other agricultural commodities (milk and export crops). The second component is producer prices in relation to purchased inputs, which are largely imported, and the costs of living. This involves the so-called terms of exchange for agriculture vis-à-vis other economic sectors.

It is understandable that in an agricultural economy such as Kenya's, which is characterized by a well developed exchange regime, the effectiveness of price fixation is crucial for the level of marketed output and income of the farming population. It is also clear that two circuits of exchange, a national and an international, intersect closely. The first is fully controlled by the state, the second completely beyond its power. Let us see how they meet in practice and how state power is exercised to deal with this obviously neat problem.

7.2.2.1. Food consumer prices

Consumer price developments show that urban consumers have been protected by the state's price fixations. Meilink (1987) collected information on food prices for the period 1975-1984 on crucial food crops. In the case of almost all food items - i.e., maize (as posho), milk, rice, beef, wheat - under price control, consumers have indeed been protected from inflationary developments. Price increases have always been below the inflation rate. For maize (consumed as grain) however, the opposite is the case: maize (grain) consumer prices have far exceeded the rate of inflation in the 1975-1985 period. Increases in producer prices have not been passed on to consumers to the full extent. Part of the shortfall was charged to the respective marketing boards which in turn had to rely on government budget support for the operational losses. In this respect it is clear that the state implements a precarious cheap food policy financed through the government's budget.⁴⁴

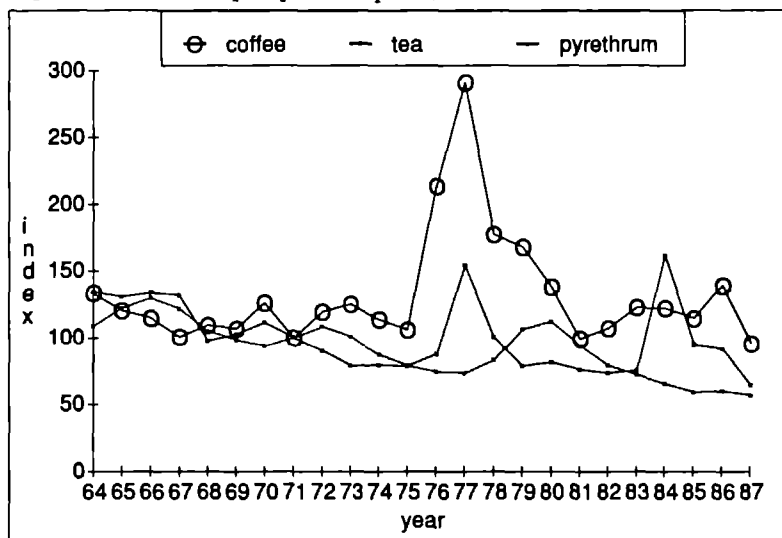
A great majority of rural households appear as net-maize purchasers on the market. Home production covers only about 60-65 % of family maize consumption in smallholder agriculture (see Chapter 4, section 4.3). Consequently, a large part of Kenya's rural population depends on unofficial market prices which are subject to supply conditions of maize on these markets. These households were thus not protected by the state's pricing policy and it seems accurate to conclude that urban households benefitted the

most. The objective of state food marketing policy to protect the rural population against price variations and to guarantee a stable supply of maize has thus not been implemented successfully.

7.2.2.2. Deteriorating international terms of exchange and its impact on production

In the period immediately after independence, prices on the world market for Kenya's principal export commodities (coffee, tea, pyrethrum) increased gradually until 1977. After that, prices except for pyrethrum decreased

Figure 7.4. Deflated export producer prices, 1964 - 1987



Source: Statistical Abstract 1965-1988

steadily, as is shown in Figure 7.4. Tea prices rose again in 1984 but declined the following years to a price level lower than prevailing in the year of the export boom, 1977. These international market price developments had severe repercussions for Kenya's political economy. The deteriorating terms of exchange for almost all producers must have resulted in a considerable decline in average income from marketed production (see Chapter 4).

When prices for Kenya's export crops fell, prices for maize increased in 1980. Maize producer prices were approx. 8 % higher in 1982/83 than 10 years before. The producer price of wheat increased during the same period by 16 %.⁴⁵ Recently, in 1988, the government raised maize (and wheat) producer prices again by 7 %.⁴⁶ Mosley (1986b) underlines the fact that since the 1930s, maize producer prices have been frequently held well above the export price of maize and that this pattern of subsidy to the commercial maize farmers has persisted through much of the twenty years since independence.⁴⁷

By deflating the producer prices for export crops by the *lower consumer price index* (1971=100), we see as is shown in Figure 7.4, that *real* producer export prices declined considerably. Except some years before 1977, only in 1977, 1978 and 1984 did the index for tea exceeded parity; for coffee for almost all years except 1981 and 1987.

During the export bonanza period, the windfall gains of high export prices were largely passed on the producers. Davis (1983) estimates that 98 % in 1977, and 92 % in 1978 of price increases officially went to producers.⁴⁸ Leys (1978) iterates that the state's direct share of the export bonanza was far lower than in other African countries and that the export boom facilitated the expansion of commodity relations in the countryside. This expansion, in its turn, propelled private accumulation in commerce and industry. This does not mean, however, that all such capital was invested productively.⁴⁹

Bevan et al. (1989) provide an analysis of responses of farmers during the years of the export boom. Apart from drinking and rather careless expenditures, large sums of money were invested in upgrading and planting more coffee as well as in purchasing land in Rift Valley Province and buying foreign owned coffee estates. People who migrated earlier to Nairobi returned to their land. Labour wages and land prices increased during this period. Finally, investment in education and housing and contributions to self-help projects were noted as significant.⁵⁰

How did the export producers respond to the absolute decline in real export producer prices. ? Research of Martin (1984) and others, as signaled earlier in Chapter 4, section 4.5.2.1, revealed an important consequence of the deteriorating terms of exchange for export commodity producers: decommodification (i.e., an increase in the death-rate of coffee trees and sloppy maintenance of coffee farms) and farmers ceasing to produce coffee. In addition, a decline in the proportion of agricultural income in total household income was noted. A more important consequence is that land use and cropping patterns changed. Land use shifted from export commodity production to livestock and food production either for subsistence or for the national market. The proportion of household income from *cash* crops declined.⁵¹

The consequence is that the volume of export commodities from smallholders declined. Figure 4.1 in Chapter 4 showed the decline of smallholder coffee production clearly. The variation in coffee production may thus be explained by the declining terms of exchange for coffee producers. Furthermore, it appeared that administrative guidelines also induced a drop in coffee production. During 1981, interplanting coffee with food crops was allowed in order to increase food production in the country. In 1983 the state prohibited intercropping with the argument that it was responsible for the drop in coffee production in 1982 and contributed particularly to a decline in the quality of coffee berries.⁵²

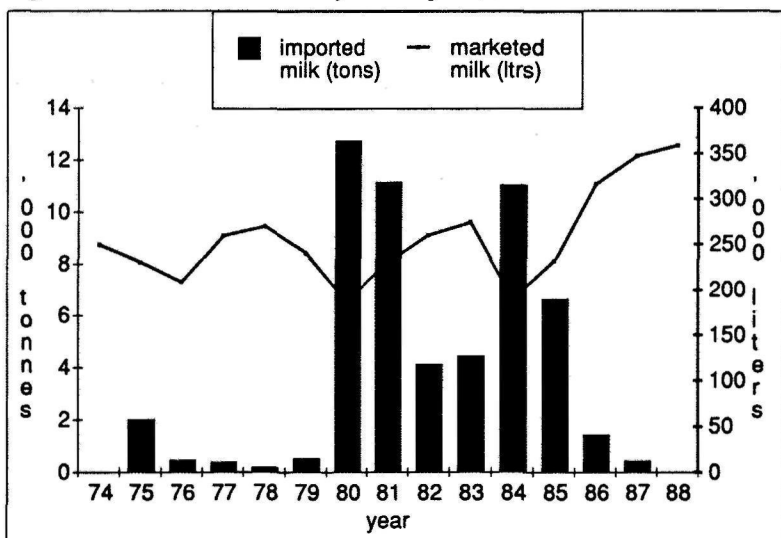
Tea production by smallholders (Figures 4.1 and 4.2, Chapter 4) showed a constant increase, however. That tea producers did not cut back on output may be explained by the fact that it only tiny little plots averaging 0.38 ha are involved, leaving probably enough room for subsistence production. Recently, small-scale tea farmers for the first time in many years expressed their discontent about the low tea producer prices and demanded a higher share of the prices received on the international market. Simultaneously they urged

more producer representation and participation in the KTDA management.⁵³ These events show some of the other difficulties in the implementation of Kenya's export promotion programme.

7.2.2.3. Consumer and national producer prices: the case of milk versus maize

Milk and maize have in common that producer prices are nationally decreed and both commodities are important wage goods in workers' budgets. Furthermore, as figure 7.5 displays, the demand for milk frequently exceeds the supply of milk offered for sale to the KCC. Imports of dried milk from a.o. the EEC are consequently necessary to keep up with the growing demand.

Figure 7.5. Marketed milk and dry milk imports, 1974 - 1988



Source: Statistical Abstract, 1975-1988

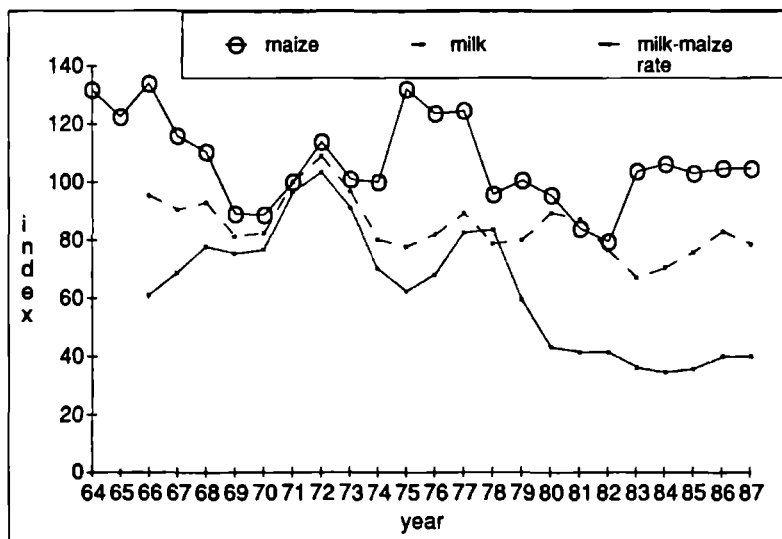
Contrary to milk prices, maize producer and consumer prices have usually (though not always) been increased in line with both maize production costs and overall consumer price indices. Figure 7.6 shows this clearly.

When whole milk producer prices are deflated by the consumer price index (1971=100), then it appears that throughout the period 1964-1987 (except in 1971) contrary to maize producer prices, the whole milk price index never exceeded parity. Furthermore the milk-maize exchange rate (calculated by dividing milk production prices by the two-year average maize consumer price of the Nairobi market⁵⁴) over the same period shows that maize consumer prices has always increased faster than milk producer prices.

The observed price differentials between milk producer prices and maize consumer and producer prices generated two tendencies in Central Province.

Firstly, Cowen (1981b, 1983, 1986) noted a tendency for smallholders of dairy cattle to replace dairying with maize production and to turn pasture into arable land. The consequence of a reduction in the volume of marketed milk, while at the same time the demand for milk increased a.o. induced by

Figure 7.6. Deflated maize and milk producer prices and the milk-maize exchange rate, 1964-1987



Source: Statistical Abstract, 1965-1989

president Moi's order that free school milk should be available, has been a dramatic increase in imports of dried milk (see figure 7.5).

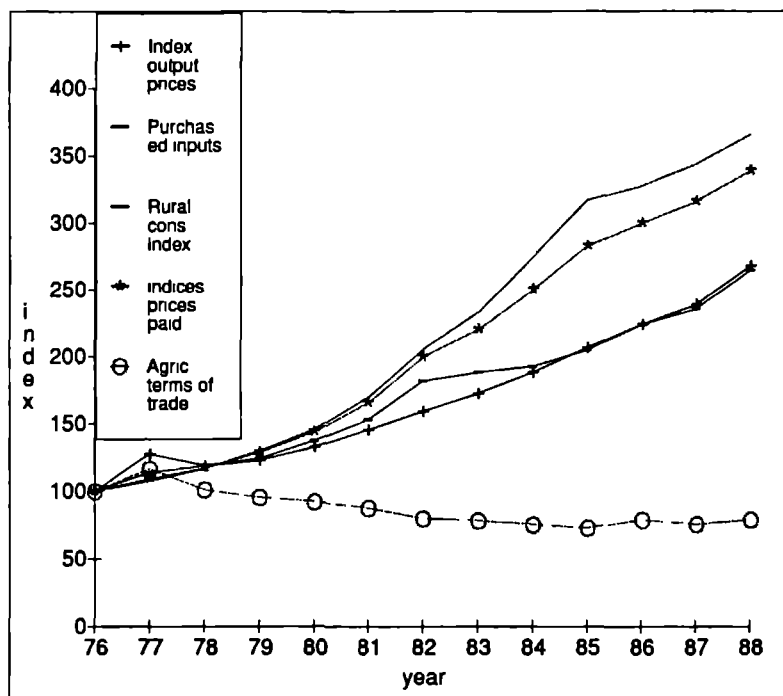
Secondly, Cowen noted the tendency to reduce maize expenditure when maize consumer prices rose, while expenditure on maize increased as prices fell. This is particularly the case in areas where commodity specialization for the internal and international market is well developed (particularly in Central Province). In these areas, food expenditure accounts for over one-half of smallholder consumption.⁵⁵

Milk farm-gate prices, however, have been raised (although still less than the maize production price and still less than consumer price rises) considerably since 1981 in favour of milk producers. Between 1983 and 1987, KCC payout prices to milk producers increased by 65 %.⁵⁶ The direct effect was as noted in Figure 7.5 an increase in the marketed volume of whole milk. It is unknown on what kind of holdings, whether on the small holdings or on the large, capital intensive dairy farms, the increased milk supply for the market is realized.

7.2.2.4. Domestic terms of trade: industrial versus agricultural sector

Figure 7.7 summarizes much of the aspects of state price fixation discussed above. The figure discloses that purchased input prices and the consumer index for the rural areas increase at more or less the same rate, but faster than the general index of output prices. It clearly shows that the general terms of trade between agriculture and the rest of the economy have deteriorated permanently over the last decades.⁵⁷ Particularly oil prices increased considerably since the world-wide oil crises of 1979 and 1982. Moreover, over the past 15 years, the price of widely used purchased farm inputs (notably seeds and fertilizers) increased by more than 400 %, while output prices have increased by slightly under 200 %.⁵⁸

Figure 7.7. Agricultural terms of trade, 1976 - 1988



Source: Economic Survey, 1980, 1985, 1989

A relevant conclusion from figure 7.7 is that the economic position of farmers is worsening on two fronts: the index of purchased consumer goods in the rural areas is rapidly increasing; the same holds true, to a lesser extent, for the price index of purchased inputs. A second conclusion, perhaps a more important one, is that the state's method of fixing producer prices for

agricultural commodities in relation to production inputs and consumer goods is founded upon a policy to protect the domestic industrial and commerce sector rather than the agricultural sector. Local manufacturers of agricultural inputs (seeds and tools), such as KSC and Ideal Casement Ltd, and other local manufacturers are heavily protected by the state by a monopoly status, tariff protection, quotas and the maintenance of an overvalued exchange rate. The maize processing industries (of which Unga Ltd is the largest) can operate on a cost-plus basis and pass on higher buying prices to consumers through controlled selling prices.⁵⁹ The same holds true for the wholesale and retail sector.

Apart from having a negative impact on the volume of export commodities produced by smallholders, the deteriorating terms of trade have serious effects on food production in the country.

In the first place, it may be deleterious for Kenya's estate producers who provide 70 % of total marketed maize volume. Data on maize-cultivated area in the estate sector may be indicative that the conditions for maize production on estates are deteriorating. Figure 7.3 indicates that, despite increases in certain years, the overall trend is one of decline. The trend towards land underutilization and inefficient farming on estates (which is not revealed by the statistics on land use in the large farm sector) may be linked to lack of capital due to diminished access to agricultural credit. A major credit scheme (GMR) was abolished in 1979 on the grounds of misappropriation of public funds, although the GMR scheme was rehabilitated in 1986 with the immediate effect of an increase in maize area. On the other hand, the restrictions placed upon imports of agricultural machinery and spare parts, and the currency devaluations which make these imports more expensive, hit the estates producers the most. Lack of enough cheap operating machines results in underutilization of prime agricultural land in the major maize producing regions.⁶⁰ The government is aware of this problem. In 1986, it promised to take steps 'to induce landowners to put underutilized land to more productive use'.⁶¹

In the second place, the deteriorating terms of trade of the agricultural sector negatively affects the uptake of new agricultural technologies, such as fertilizer and improved seed. The price of imported fertilizers is frequently raised and fertilizer prices rise faster than producer prices. The relationship between the increase in fertilizer prices and the net return from fertilizer application in maize production is estimated as negative. It is approximated for 1983/84 that returns per shilling spent on fertilizer for maize was Ksh 3/-. Based on FAO data from 1972, it was estimated that the return was between Ksh 4/50 and Ksh 7/-. The returns have fallen since 1972 primarily due to the rapid rise in fertilizer costs since the oil price rises in the 1970s.⁶²

The use of hybrids and the marketed maize output levelled out somewhat between 1978 and 1981 as is shown in Figure 7.1. Apart from the severe drought Kenya suffered during 1971, 1979, 1980 and 1984, the deteriorating terms of trade for the agricultural producers can be held accountable for this drop. The exact effect of the frequent increases of hybrid maize seed prices on adoption are unknown. Since 1979 the purchase price of maize seed have more than doubled, from Ksh 40/- per 10 kg bag to Ksh 104/- in January 1988. It is reasonable to assume that the smallholder in particular will experience these price rises for seed (and fertilizers) as a negative. The poor peasant farmers in

Nandi district reacted in this way when they were informed about the proposed price increase. Buch-Hansen & Kieler (1983), for instance, discovered that farmers retreated from hybrid maize commodity exchange circuits because the production costs were too high.⁶³

There has been criticism of the pricing policy because it in effect discriminates against the agricultural sector in favour of the industrial sector. It has harmed the agricultural sector by implicitly taxing agricultural exports through the maintenance of an artificially low exchange rate, while the manufacturing sector was protected with tariffs and quantitative trade restrictions.⁶⁴ Meilink (1985) detects a gap between policy objectives and implementation. The agricultural sector cannot be expected to fulfil its difficult threefold task of providing food and employment for a rapidly growing population and producing export commodities, while simultaneously, persistently loosing the economic strength to do so.⁶⁵ Hopcraft (1979) concluded that virtually everything the farmer buys that is locally manufactured, involves a large transfer element, taxing the mass of farmers and subsidising a few protected manufacturers.⁶⁶

Seen in this policy environment, it is not surprising that capital accumulated in the agricultural sector is increasingly channelled into the circulation sphere of the economy, into transport companies, petty business, taxis, hotels and private tractor-hire enterprises. This trend is noted in Nandi district as well as all over Kenya.⁶⁷

7.3. The role of agro-institutions

Besides land transfer programmes and land tenure reforms implemented after independence (Chapter 4), policies to extend credit and extension services to the farming population were an essential element of the 'agrarian revolution'. One of the reasons why the state implemented land tenure reform was that private land tenure would facilitate the uptake of new technology by the provision of credit and extension services to the farmer. Agricultural R&D was given the task of developing ways to enhance production by land- and labour-saving technologies. The discussed hybridization of maize was one major achievement of Kenya's R&D system. These matters are perceived by state policy makers as crucial ingredients of an technological and administrative foundation upon which commodity production could expand. The role of the agro-institutions is discussed below.

7.3.1. The orientation and role of agricultural research

Agricultural research in Kenya has a long history. The first research institutions originate from the beginning of colonial rule. The majority of initiatives came from the colonial administration⁶⁸ but settlers too were active in this field.⁶⁹ One of the outcomes of colonial agricultural policy was invariably an effort to enhance plant and livestock breeding in order to raise productivity in the agricultural sector. The structure of the seed industry, based on plant breeding programmes, has been influenced by the co-evolution of public and private sector breeding activities. A number of research institutions were established in the early days when large numbers of settlers were attracted to Kenya.

Agricultural R&D in Kenya receives the greatest share of research funds in the country. A World Bank report estimates that per year 70 % of the total

research budget is directed to agricultural research. The government and foreign aid agencies together fund the research budget. Most foreign aid support in research is provided through development projects, and the bulk of funding goes to meet personnel costs and expatriate technical assistance. The target spending level is set at 1% of the gross agricultural domestic product. Coffee and tea receive the largest single share of the total budget, 27 % and 5 % respectively (reflecting their importance for the national *monetary* economy). Livestock receives about 20% of total research resources and food crops about 25%.⁷⁰

Agricultural research, and plant breeding programmes in particular, have a local and international component.⁷¹ Internationally, Kenya is today a beneficiary of regional and national programmes of international agricultural research centres co-ordinated by the Consultative Groups for International Agricultural Research (CGIAR). This network includes a.o. CIMMYT (Mexico, maize), ICLA (in Ethiopia, livestock), ILRAD (Kenya, animal diseases), CIP (Peru, potatoes).

Nationally, research is carried out by a number of ministries and institutions in Kenya (see Chapter 3, Figure 1). Various stations conduct research in certain specific crops and are situated in the major agro-ecological zones. Maize and pasture seed research is mainly concentrated in the estate areas around Kitale and carried out by the National Agricultural Research Station (NARS). Crop research for adapted varieties of maize, cassava, grain-legume, millet and sorghum is also taking place. The stations are located in the coastal zone and semi-arid areas (in Mtwapa in Coast Province and in Katumani, Eastern Province, respectively). The seeds bred by NARS are released for commercial seed production after testing, certification and registration by the National Seed Quality Control Service (NSQCS) in Lanet. Wheat, barley, oil seeds and oats research by the National Plant Breeding Station is taking place in Njoro. Coffee research by the Coffee Research Foundation is located in the coffee zones (Kisii, Meru, Koru and Ruiru), while tea research is conducted in Kericho by the Tea Research Station. Co-ordination among these institutions has proved to be a major problem. The enactment of the Science and Technology Act in 1977 was meant to resolve these difficulties. One immediately result was the establishment of the Kenya Agricultural Research Institute (KARI) in 1979 under MOALD.⁷² KARI's main objective is to co-ordinate, execute and manage agricultural research in Kenya.

World Bank reports and ISNAR reports reviewing Kenya's agricultural research system claim that agricultural R&D has an outstanding record. Coffee and tea research, the introduction of hybrid maize and the breeding of rust resistant wheat varieties had a significant impact on agricultural development (see also section 7.1). In addition, a widespread and diversified institutional network has been established over time.

Prior to independence, research had been primarily focused on the needs of large-scale settler farmers and upon the fertile areas, where most of the settlers were located. Both ISNAR and the World Bank have noted, however, an increasing interest in problems of smallholder agriculture and in production systems for medium potential and semi-arid areas. But there is much left to do. Both agencies mention in their reports that more research needs to be carried out at farm level on specific problems of food production under smallholder conditions. Research on millet and sorghum has been limited, in part due to

the orientation of the research system towards serving the needs of larger farms. Horticultural crops too receive less attention than they should have.

Both reports are highly critical for a number of reasons about the commitment of the state to fund research programmes. R&D in general is constrained by a limitation of funds received from the state. Consequently, foreign aid agencies are the major providers of funds and personnel. The reports noted, furthermore, a clear tendency towards maintaining existing programmes and that new and urgent initiatives are neither developed nor implemented. In addition, because KARI does not function properly, allocated funds are spread over a large number of institutes and research projects, some of which may be irrelevant to national needs and many of which cannot be funded at a level sufficient to achieve results. A second major constraint for research in Kenya is staffing. ISNAR in particular noted a critical shortage of adequately trained personnel.⁷³

ISNAR and World Bank aside, the state itself is aware of the limited effects of R&D programmes. The Development Plans 1979-1983 and 1984-1988 acknowledge that research should be oriented towards the needs of smallholders and less potential areas in Kenya. The fourth Development Plan states clearly that the creation of appropriate technology for the smallholding sector is one of the greatest challenges for Kenya's research system (see Chapter 3, section 3.2.).

But to what extent there has been a reorientation in policies concerning agricultural R&D is rather questionable. Several authors speak in this respect of rigidity of the state institutions involved in R&D policy formulation.⁷⁴ The gap between objectives and implementation is critical and there appears to be no commitment to close the gap.

A good example to show the lack of commitment of the state is the situation in many research stations. While the government stresses the importance of agricultural research for enhancing food production, the research station responsible for maize research (NARS, in Kitale) has deteriorated to the point where an extension worker wishing to consult project reports from the early 1970s in the library at Kitale can no longer do so. Lack of funding due to withdrawal of donor support (from Britain) and lack of state funds can be held responsible for this decline.⁷⁵

Although the state emphasizes genetic diversity and the maintenance of gene banks to conserve the nation's natural resources, genetic resources and germ plasma accessions have been reportedly lost due to poor gene bank management.⁷⁶ Here again we see a critical gap between objectives and practice.

Other critical assessments go beyond the lack of funds and institutional formats and point more at the social and technological orientation of R&D programmes in Kenya. Agricultural R&D is still oriented towards the needs of large farmers. Research on farm implements is only one example of this bias. There is a well-established programme to test farm implements for large-scale farming, but there is nothing comparable for smaller machinery suitable for small farms.⁷⁷ There has been very little attention paid to the promotion of cultivation with the help of oxen. Policy makers and researchers apparently held the view that farmers should shift directly from hoe cultivation to tractors.⁷⁸

A second example is agronomic research. Research findings are based upon pure and row-planted crops. The achievement of maximum biological yields is the goal of the implementation of R&D. Little research, apart from some isolated events, has been done on major smallholder problems, such as the time of planting, the availability and price of labour, competition among crops for labour, intercropping, and less than optimal husbandry and input use.⁷⁹ Technological solutions are presented and introduced as one-dimensional, as a package to the smallholder farmer, though farmers, because of many of the constraints analysed earlier in Chapter 6, rarely adopted all the components of the package.

Testing of results is rarely carried out on smallholdings under conditions actually faced by farmers. The researchers tend to have very little contact with, and very little understanding of, small farm conditions.⁸⁰ And as farmers do not see their local research stations as relevant to their own situations, they in turn make no attempt to exert any pressure on the agricultural research programme.⁸¹

Agricultural research is, in other words, still more tailored by the needs of the larger farmers and by optimum technological conditions for mono-cultural production, than by the needs of small farmers and the low potential areas. There has been no attempt to relate technical solutions for problems in agriculture to the needs of farmers. Research is an isolated event and not supported by a socio-economic and farm enterprise analysis.⁸²

In Chapter 6 we went into detail on the socially differentiating effect of hybrid maize technology at regional level. The path diagram showed clearly that hybrid maize technology is biased toward the large farmers and favourable ecological zones. Despite the bias in R&D, farmers achieved extremely good results as is shown in the path diagram. Farmers appeared not to be passive receivers in the process of technology transfer.

A third component of the orientation of agricultural R&D is that plant and livestock breeding programmes clearly remain a product of colonialism. Colonialism, traders and missionaries brought new plant and livestock species to Kenya. Maize varieties have been cultivated in Kenya already since the 1500s when they were introduced by Portuguese traders who probably brought them from the West Indies.⁸³ The same holds true for livestock species. The settlers brought 'exotic' stock when they settled in Kenya.

Over the years, Kenya continued to import as well as to collect local genetic resources for breeding purposes. Over the 1964-1985 period, Kenya imported nearly 64 % of all germ plasma accessions for breeding programmes. The corresponding figure for cereals was 49 % of all the accessions, while maize breeding programmes the figure for imported plasma was 88 %.⁸⁴

Similar trends can be noted in forest and livestock species. In 1985 nearly 95 % of Kenya's planted forests were exotic, and nearly 93 % of the germ plasma used in artificial insemination programmes was from exotic dairy breeds (Ayrshire, Friesian, Guernsey and Jersey).⁸⁵ The reduction of the genetic diversity of local livestock breeds was effectively undertaken in the colonial period, although ownership of graded cows was restricted to the settler community (see Chapter 5 for livestock programmes in Nandi district).

Juma (1989) stresses that 'by emphasizing increased food production as the main focus of breeding programmes Kenya has tended to drift towards a narrower genetic base in major commercial food crops.'⁸⁶ This shift does not,

however, reflect the preferences of the consumers, who tend to opt for greater variability in their food resources as well as in taste and colour of varieties.⁸⁷ Beans and local maize varieties have been gradually adapted to producers/consumers preferences since their introduction into East Africa. This kind of taste and colour preference and local knowledge about local varieties is not the kind of knowledge that informs R&D policy makers. The R&D industry in Kenya clearly follows a different path as it is oriented towards mono-cultural production, mechanization and genetic uniformity.

Research on maize has always neglected local varieties and concentrated instead completely on hybrids and synthetics. The starting point has always been the technological superiority of hybrids over local varieties. It may be questioned whether hybrid maize varieties really produce higher yields than local varieties or whether they have contributed to an increase of food security at household level.⁸⁸ Hybrids are generally less drought resistant than local varieties. Perhaps this is also an explanation for the fluctuations in the marketed volume of maize. Drought resistance is a favourable feature for maize in a country of which more than 80 % of the area is considered as arid and semi-arid, but even the hybrid variety with drought resistant features, Katumani maize which is particularly developed for arid regions, appears to fail once in three years.⁸⁹

Due to the great emphasis on maize (and wheat), other important food crops such as beans, millet and sorghum have been neglected. Heyer (1975) noted that if agricultural R&D was more concerned with sorghum and millet the situation in the arid and semi-arid areas would have been far better than it is now. Agricultural research on these crops is severely practically nil.⁹⁰

To conclude the overview of agricultural R&D. It must be said that despite outstanding and glorified achievements in certain crops, it is hampered by institutional weakness and a general lack of orientation to the needs of the small producers in Kenya and genetic diversity. The gap between policy objectives and concrete implementation is, however, critical. This conclusion goes beyond the institutional weakness and ineffectiveness due to lack of funding detected by the World Bank. The World Bank's recommendation is to redirect research orientation from a large-scale towards smallholder bias, from a fertile areas bias towards dryer areas. The staffing and funding constraints must be solved in the order to improve the organization of research.⁹¹ The Bank does not make clear what kind of agricultural researchers are needed to close the gap.

7.3.2. Extension services

Closely connected to agricultural R&D is the dissemination of results to the farming population. Institutional weakness, too many administrative tasks to fulfil and understaffing are generally pointed out as the weak parts of extension in Kenya. The actual knowledge of extension field-workers appears to be low. In Kenya in the late 1970s, only a third of the field staff were considered to have adequate knowledge of both technical matters and extension methods.

An examination of extension involves two critical and highly interrelated components. One is the nature and contents of the extension message; the second is the nature of linkages between extensionists and the farming population.

7.3.2.1. The nature of the message

It is obvious that the extension service as an off-shoot of the agricultural R&D system is organized rather similar lines. Extension is primarily concentrated on the adoption of packages and the use of purchased inputs only (see Chapter 6). Crop recommendations have been largely oriented towards maximizing production, based on research findings relevant for large farms. This work may be considered, as the World Bank does, as of little relevance for commercially-oriented small farms and as having tending to ignore subsistence farmers.⁹²

The Bank criticizes the concept of crop 'packages'. Crop packages have tended to focus on applications of fertilizers and use of hybrid seeds, giving little consideration to crop husbandry or the risk element. Moreover, as the Bank notes, packages have usually been presented on an 'all or nothing' basis, leaving little room to adjust fertilizer recommendations to farmers' ability to pay and husbandry methods. Limited attention has also been paid to the economic attractiveness of these packages. Because of input prices rising faster than output prices, many packages that were viable in the past are not viable now.⁹³

This line of thinking touches, however, only a small part of the problems related to technology transfer which is part and parcel of extension messages.

The tendency in the practice of extension is to advise uniformly. The extension worker is inclined to introduce and to present new technologies as scale neutral, applicable to all holdings irrespective of size. The extension message is increasingly standardized. The effect of hybrid maize technology has been examined in detail in Chapter 6. Hunt (1984), too, emphasizes that crop package recommendations centred on improved husbandry (i.e. correct time of planting, row planting, optimum spacing, clean weeding, fertilising, improved seeds) necessitate, at specific points in time, increased labour inputs which may have to be withdrawn from other productive activities.⁹⁴ Labour constraints and limited cash sources influence the farmers' response to innovations and reduce their willingness to adopt risky innovations. Hunt (1984) claims that for these reasons the poor peasant farmer is only adopting a part of the recommended crop package and precisely that part which is consistent with the resources available to them. Packages, however, are designed to apply as a whole: only then will technology work, and will a higher yield be the result. This means that the likely adoption of the package by the farming community as a whole is restrained severely.⁹⁵

7.3.2.2. The nature of the linkages

Statistics and research on the extension service and the extent to which it reaches the smaller farmers give evidence of the fact that, in absolute numbers, the larger farmers and the so-called 'progressive' farmers among the smallholder community, were reached and being served better than the poorer smallholder.⁹⁶ Several studies have concluded that the impact of extension services on production has been rather small and ineffective. Farm visits are limited and infrequent. Moreover, more than half of these visits have tended to be to 'progressive' or 'receptive' farmers (i.e. middle peasant and capitalist farmers) and to neglect the 'non-progressive' or non-innovating farmers (i.e. poor and subsistence farmers). Women farmers also receive less than their

share of extension visits while food production is largely the produce of women farmers.⁹⁷

A detailed study by Leonard (1977) revealed that the extension service was inefficient in terms of stated objectives and, more importantly, the institutional relations between extension service and target group was severely biased. Leonard argued that 'current extension practice is accentuating the gap between the wealthier minority and the poor majority of farmers.'⁹⁸ Another study maintained that 'extension creates poverty' in Kenya.⁹⁹ The extension service made the so-called 'progressive' or 'receptive' farmers focal points of attention and tended to neglect the poor farmer. The service was biased in economic terms towards the successful farmers.

Leonard's research offers several explanations for this uneven distribution of service.¹⁰⁰ It is partly explained by the fact that MOALD focused more on the distribution of services among ethnic groups and regions,¹⁰¹ and partly by the fact that MOALD did not exert pressure on the extension apparatus to redistribute state services and to produce equity between socio-economic groups. On the contrary, policy guidelines were directed at increasing productivity in agriculture, and the 'progressive' farmers appear to be the most likely group to promote this. Emphasis on the 'progressive' farmer is the easiest way of securing demonstrable results.

A second explanation suggested by Leonard is hidden in the social organization of the extension service. The extension bureaucracy comprises a hierarchy of senior and junior staff at district level who transmit an extension message propagated by MOALD to the agricultural population. The system does not only reflect a 'top-down' pattern, it contains different positions for senior and junior field staff. Senior staff enjoy better working conditions, fine houses and have promotion opportunities; the junior staff are paid much less and have slim promotion opportunities. The field-workers are, as Leonard stipulated, loyal and likely to follow ministerial orders. The top-down organization in which the often authoritarian senior supervises the junior official, programmes the latter to do his work according to the norms of the service. Junior officials found shelter under MOALD's extension guidelines for a progressive farmer strategy, and tended to adopt, collectively, own work norms which often led them to restrict their 'output' (i.e. farm visits) and perform superficially.

A third factor for an explanation of the perseverance of the 'progressive' farmer strategy is that these farmers have more political awareness and influence than the rest of the farming community: they are able to command delivery of the services needed.¹⁰²

Leonard emphasized that although the extensionist is used to working in a progressive farmer strategy, it is safe to assume that, if such a strategy is abolished by MOALD, the extension worker will follow almost automatically. Leonard explains this by the fact that he did not discover any 'class' alliance between rich progressive farmers and extension workers, at least at field level. Although the providers of services are part of the local elite, by the same token supporters of the existing rural, social order, the extension worker is primarily responding to the character of demand, not the social class of the 'client' as such. Steeves (1978) pointed out that extension workers are by per definition 'progressive' farmer minded. Steeves conducted research on extension service

in tea schemes under control of the KTDA. He found that the *lower* ranks of the extension service of KTDA expressed a bias in favour of the small farmer.¹⁰³

These situations suggest that if MOALD is clear about the target group of extension, the extension field worker at least will accept these guidelines and work according to the norms set by MOALD. The fourth *Development Plan* 1979-1983 stated clearly that agricultural extension work should depart from the progressive farmer strategy in favour of group extension programmes designed to reach more farmers, i.e. including small farmers. The Nandi survey, however, revealed that the bias in agricultural extension service in favour of 'progressive' farmers continues to exist (Chapter 6). This suggests that MOALD is not clear about its extension policy guidelines. The adoption of the T&V system in 1982 did not modify the bias in extension policy in Kenya. Neither the top-down organizational pattern, nor the perception of the provider of services and the technological commodity package nor the class structure in the countryside changed dramatically. Leonard's critique, and that of other researchers, that the uneven distribution of extension services widens inequality remains accurate.

The implementation of the National Dairy Development Programme is a positive or rather counter-example. DDP is indicative of a situation whereby extension is organized to deliver services and a diversified technology package for dairy farming specifically for small-scale farmers. The implementation of DDP created tensions within MOALD, partly because DDP-extensionists did not want to work within the 'progressive' farmer strategy which continued also under the T&V system. Since 1981, MOALD has split into MOA and MLD mainly because of this argument. DDP consequently established different extension linkages with dairy farmers outside the realm of the district level extension departments of MOA and the local Farmers Training Centres.¹⁰⁴

The World Bank's recommendation to overcome the prevailing tendencies in extension is more funding for extension work and to increase training and the motivation of the extension workers in order to establish closer links between research institutions and the farm. The Bank does not make clear how it perceives 'motivation' of extension field-workers. It hints only at increasing promotion opportunities for qualified officers, better housing conditions and so on.

7.3.3. Distribution of agricultural credit

State-managed credit schemes are administered by the Agricultural Finance Corporation (AFC). The creation of such a state institution was envisaged in the Swynnerton Plan in order to facilitate the expansion of African agriculture. Together with Cooperative Bank of Kenya (CBK), AFC provides most of the credit. Much of that capital is obtained through foreign aid relations established with multilateral aid institutions and laid down in bilateral agreements. Through direct and indirect regulations issued by the Central Bank on the provision of credit, the state controls the flow of credit from commercial banks and non-financial institutions to the agricultural sector. Private financial institutions and commercial banks are required to allocate at least 10 % and 17 %, respectively of their capital loans for agricultural purposes.¹⁰⁵

The history of Kenya's agricultural credit system is featured by partiality and crippling debts as a result of which many credit schemes were abolished.

Research on the provision of credit and who actually gained access to agricultural credit suggests that credit schemes administered by the state or by private commercial banks favoured the already better-off in rural society and particularly those farmers located in regions where agriculture production is highly commercialized and where production involves high value crops (coffee, tea, pyrethrum). The Nandi survey as well the literature indicate that access to agricultural credit by smallholders is limited. Besides that, poorer smallholders have difficulties in gaining access to state-financed credit schemes due to discriminatory regulations.

The IRS-I survey revealed that smallholders earning below Ksh 2,000/- per annum obtained fewer loans from banks than those smallholders with incomes above Ksh 4,000/-.¹⁰⁶ It is estimated, that between 1952 and 1972, only 65,000 of Kenya's more than 1 million smallholders gained access to formal credit.¹⁰⁷ The Kenya government estimated that, in 1972, the AFC had loans outstanding to 14,500 small-scale farmers which was little more than 1 % of all smallholders.¹⁰⁸ Heyer (1976) notes that smallholders receiving credit were exactly the upper quartile of smallholders in terms of income and holding size.¹⁰⁹ In addition during the immediate independence period, smallholders in settlement schemes were favoured over those outside settlement schemes.¹¹⁰

The colonial state's credit policy bias in favour of white settler farmers continued after independence, especially through the Guaranteed Minimum Return credit scheme (GMR). The GMR programme, the backbone of the credit system for the large farm areas since the early 1940s, provided credit to farmers with a minimum holding of 40 ha., which was reduced to 6 ha. in 1966. The reduction of the minimum size of the holding to 4 ha. signifies the trend for the advantages for large farmers to be extended to the 'larger small-scale' farmer in the country.¹¹¹

The GMR scheme was terminated in 1979 due to its bad repayment record and misappropriations of public funds. The AFC, the administrator of GMR, was crippled by debts totalling more than Ksh 800 million. GMR was therefore replaced by the Seasonal Loans Credit Schemes (SLCSs).

The termination of GMR must have been negatively viewed by Kenya's estate producers. The dissolution of the programme coincided with a severe drop in marketed maize production in 1980. Recently, the state scrapped the follower of GMR, SLCS, and rehabilitated the GMR-scheme. The major reason for scrapping SLCS was again loan recovery problems. More than Ksh 165 million was, at that time, still outstanding. The rehabilitation of GMR was accompanied by directives which would prevent the previous abuses. Loans would be restricted to farmers who had no outstanding loan arrears under their repayment schedule for loans made in the 1984/1985 season. Earlier that year, President Moi ordered a fierce crack-down on loan abusers. The Kenya National Farmers' Union (KNFU) has come to the defence of the farmers.¹¹²

The GMR-scheme can be evaluated as a generous state subsidy for large farmers and estate producers. Amongst the worst abuses of the GMR-scheme were prominent politicians and high ranking civil servants who used their influence to gain privileged access to AFC-loans.¹¹³ Leys (1975) pointed out that Kenya's large farmers have always commanded considerable political power to gain privileged access to state financed credit.¹¹⁴ This can be

compared with the 'bulldozing' practice of large farmers reported in Nandi by an AFC-official (Chapter 6).

Recent data on credit reveal that this pattern of distribution of state funds has changed somewhat: the share of capital loans to small scale farmers in relation to loans to large scale farmers has increased, although, the data indicate that long-term credit (for 10 years and over) continues to flow more to large farmers, and short term (for 1-3 years) flows to small-scale farmers.¹¹⁵ One explanation for the diminishing of credit flows to large farmers is the withdrawal of the GMR-credit scheme, although it was re-established in 1986.

Besides state-financed credit schemes, large farmers have also been well accommodated by private commercial banks, access to which is generally denied for small scale producers due to a jungle of discriminatory regulations in these commercial banks (see also Chapter 6 for an example of these regulations applied by private banks in Nandi district). Lending by commercial banks typically goes to farmers with over 50 ha. of land.¹¹⁶

Large farmers and rich smallholders often have greater and easier access to credit, and not only because their non-farm income is used to secure loans. Credit institutions and particularly private banks prefer not to extend credit using land as collateral because of uncertainties of repossession. Private commercial banks tend to favour those who already own large holdings. One obvious reason is that this involves fewer loans and thus much lower transaction costs.¹¹⁷ As a result of the regulations attached to the provision of credit, state-controlled agricultural credit resources have found their way onto farms of better-off farmers and particularly estates. Okoth-Ogendo (1981) showed that the share of AFC-loans to large farmers tripled between 1974 and 1978, while the smallholders' share increased only by 23.2 %.¹¹⁸

The AFC illustrates the institutional weakness of the financial system in assisting the smallholder. Okoth-Ogendo suggests that AFC loans extended to smallholders represent merely a cosmetic exercise. There is a preoccupation with ability to repay rather than with the farmer's real need for credit.¹¹⁹ Moreover, the landless are virtually excluded from credit. Mortgages for land purchases are extremely rare.

The limited coverage and relatively poor performance of Kenya smallholders' credit programmes in contrast to the their large share in marketed production, raises serious doubts about the role of credit as an instrument to foster agricultural growth. Von Pischke (1977) found for instance that self-financing has been more important than formal credit as a motivating force in increasing land productivity. It involves fewer financial risks and it leaves the farmer in greater control of his or her activities.¹²⁰ This risk avoiding strategy was also noted among the farmers in Nandi district.

The poor performance and bad repayment records of many agricultural credit schemes in Kenya is not only based on privileged access to the schemes or due to the regulations which accompany the issuing of credit. It should be noted that the agricultural terms of trade have deteriorated markedly over the past 15 years, resulting in a loss in purchasing power by the farming population. Agricultural profitability declined both as measured by the index of agricultural prices received relative to input prices, and when compared with other economic sectors' terms of trade. Capital accumulated in agriculture was consequently increasingly channelled into circulation.¹²¹

Apart from the fact that the performance of public-sector credit programmes is disappointing, it appears to have deteriorated in recent years. While total lending in agriculture has increased more than four times over the last decade (from an estimated K£ 47.5 million in 1972 to an estimated K£ 225 million at the end of 1982), growth has slowed dramatically in the last decade. It has declined steadily in real terms since 1979 - 1983.¹²² One reason for the decline is that the target of 17 % lending to agriculture imposed on private commercial banks by the state is only being met by less than a third of banks.¹²³

Kenya's agricultural credit policy is, as the literature suggests, severely biased and frequently crippled by bad repayment records. Due to the institutional weakness of the credit institutions and unfavourable economic conditions, many credit schemes were inefficient and ineffective. With respect to economic conditions, both unfavourable terms of exchange and the operation of the market are involved. Many smallholder-designed input-supply credit schemes failed because either inputs were not available at the right time or the marketing boards failed to pay farmers in time.¹²⁴ The existing credit schemes also tend to favour farmers producing high-value crops (the so-called 'cash crop bias'). In many of these cases, single crop authorities (such as KTDA) and private companies (BAT, Kenya Breweries, etc.) are involved; these credit schemes can be labelled as successful. The overall conclusion on Kenya's credit policy is that it most certainly has facilitated commodity production in the country and, more importantly, current credit policy has favoured economic growth over equity.

7.4. Conclusions

This chapter examined the major technological and administrative components of Kenya's agrarian structure in relation to the implementation of the national Food Policy. The created instruments are intended to lay down an structure (institutionalization) to commoditize the agricultural economy. The instruments of state intervention examined became thereby increasingly part of the life world of the farming population and their decision-making process to arrange their own farming strategy.

The Kenya case indicates that farmers respond clearly and quickly to changes in the terms of exchange which are essential conditions for production and reproduction. Correct pricing for inputs and consumer needs appear to be necessary conditions for increasing agricultural commodity production in congruence with national policy objectives.

The overview of state intervention in marketing and pricing indicates that these instruments of intervention are rather ineffectively applied. Prices and marketing structures appear, apparently, to foster particular economic and political objectives. The objectives of the state to be achieved through the NCPB and its forerunners and the *Annual Price Review* undertaken jointly by the OP and *Treasury*, to establish controls in favour of consumers, controls which would foster maize production and which would evade black markets, have often not been met. Prices for maize have not been stabilized (objective number one, since 1942). On the contrary, prices varied widely by regions and seasons. Moreover, producer price fixation in relation to inputs and consumer goods has harmed the position of smallholder producers. The pricing system has tended to open up a large gap between producer and consumer prices for

maize. The logical consequence was, a reduction of marketed volume of other commodities, since farmers - as consumers - have found it cheaper to grow maize or other commodities themselves for home consumption.

It is clear that the state institutions involved in all kinds of price-fixation processes (notably OP and Treasury) are not able to perceive the main rationale behind the farming strategies of the smallholder population. Producer prices are not tied to consumer prices of food. There is a clear tendency to separate the subsistence element of production from the exchange components of production. This evoked not only (unforeseen) responses from small-scale farmers but also reactions from Kenya's estate producers. Because of the deterioration in the conditions of estate maize production (withdrawal of credit schemes, import restrictions and currency devaluation), the marketed volume of maize from estates dropped significantly. Less maize was available, and farmers responded by growing more maize for subsistence and cut back on export production. The impact of the inefficient maize marketing system and related price regulations has affected not only the welfare of rural households, but also the state's objective of maximizing foreign exchange earnings and reducing government spending on food (maize and milk) imports.

It seems that the state instruments to deal with the deficits on the balance of payments account - import restriction, currency devaluation, preventing abuses of public funds - are detrimental. The opposite of what is intended is most likely the result, with the immediate effect that the influence of foreign aid agencies (notably of IMF and World Bank) on policy implementation is increasing. The intervention of the World Bank in the maize marketing system is a clear example. The Nandi survey indicated, however, that the problems of maize marketing are still not solved.

Inefficiency of state intervention is, however, only one component. This chapter has brought forward the selective nature of intervention. The logical interaction of agricultural R&D, dissemination, the biased nature of the linkages between various institutions, produces the unequal distribution of the possible benefits of commoditization of the agricultural economy. An agrarian structure emerged upon which economic growth is founded, but which reproduces simultaneously heterogeneity in agriculture as well as creates tensions inherent in the structure which might be deleterious to the state's objective of maximizing output.

The agrarian structure in Nandi district as well as at national level revealed serious partialities in the part of these institutions. Nandi farmers, in particular the poor, are hesitant to sell maize to the NCPB, were denied credit and did not receive visits from extension officers. The issue of credit and the access of Nandi's capitalist and rich farmers to it, widened the gap between the rural strata as well as between the Nandi and the Luhya. Nandi appeared not to be an exception to the rule. Credit, extension, marketing arrangements and agricultural R&D have been among the mechanisms which govern the process of differentiation in Kenya.

Technology transfer is only one element of this process but has far reaching consequences. The commoditization of the economy which is the logical accompaniment of the hybridization of maize causes severe constraints for the farming population, particularly for the poorest among them. The crucial physical production inputs, hybrid seeds and fertilizers, appear increasingly as

commodities in the production process and not every farmer can afford to purchase these requirements for hybrid maize production without creating other constraints. Due to the emphasis of the state on hybridizing the production of the staple food maize, land-poor farmers, in particular, are forced either to increase their rate of commercialization of agricultural production as a consequence of which they appear later in the season as food purchasers on the market, and/or are compelled to straddle agriculture with off-farm work.

When seeds, fertilizers, family or wage labour are not available at the right time and/or when payments for that part of the harvest which is marketed to the NCPB are delayed, production will be curtailed and farmers can only plant late the following season. The state has assigned itself with the important task of regulating the output market, but showed to be incapable in fulfilling it.

Based on a quantitative analysis, it was shown that the total effect (within a wide range of other variables) of a particular component of the state technology policy on yield, hybridization of maize, was rather disappointing. More importantly, technology transfer to agriculture appeared to be biased towards favourable ecological areas and appeared to be a basic component in large farmers' entrepreneurial strategies. Commoditization and institutionalization in Nandi, governed by the state, clearly have a selective character. The almost logical outcome is that social differentiation of the agricultural population will be reproduced constantly. This raises some doubts about the prevailing technology policy of the state in the agricultural sector, doubts about the standardized crop package recommendations and the distribution of the benefits among the agricultural population. Chapter 6, however, indicated the ability of farmers to transform the standardized commodity package to their advantage on an unplanned way. They are able to produce considerable yields. An enormous capacity and knowledge is lying idle in the rural areas of Kenya, a knowledge not of the kind that generally informs policy makers. Agricultural R&D organizations persist in ignoring these potentials of development.

A particular aspect of technology transfer involves the time of planting and the creation of labour peaks. The Nandi survey indicated that as the time for planting hybrid maize becomes a conditioning factor for obtaining high yields, mechanization is, as noted, the response. The employment-generating effects of hybrid maize, one of the claims of success, is therefore also ambiguous. Agricultural labour input and wage-labour demand is only required during a few months of the year and thus primarily casual. This implies, too, that there are periods where labour power is severely underutilized. Additionally, when the conditions for off-farm work during periods of low labour demand are absent, it is rather difficult to make productive use of the free labour time. The noted trend towards mechanization indicates that employment opportunities are not created and that rural labour is severely underutilized, leaving potential for development unexplored.

The positive effect of increased labour demand put forward by Gerhart (1976) and the state can easily be turned into a negative effect. In addition, the degree to which the higher yields in hybrid maize production are reached by increased employment of new technologies and husbandry practices depends largely on the location of the farm in favourable agro-ecological zones. To

make matters worse, the inefficient marketing and pricing system tends to reinforce this pattern.

Notes

- 1 See Development Plan 1966-1970, chapter 6, p. 46, Gerhart (1976), p. 47 and Leys (1975), p. 106.
- 2 See AIR/World Bank (1985), Douglas (1980), Rundquist (1984) and Gerhart (1976). It is stressed that the rate of adoption of hybrids by Kenyan farmers was much faster than, for instance, the adoption of improved varieties in the United States in the 1930s.
- 3 For a detailed overview of the maize improvement programmes and results in the late 1960s, see Harrison (1970). See also Acland (1970).
- 4 KSC modelled its distribution network on those used by beer, soft drink and cigarette companies whose products can be found even in the more remote areas.
- 5 See Gerhart (1976) and IRS-I.
- 6 AIR/World Bank, Volume 1. Main Report, chapter III, p. 2.
- 7 See Farm Management Handbook (1982), several volumes.
- 8 The Nandi survey in 1987 revealed that these recommendations are widely followed by farmers. Gillette (1980) conducted a limited survey in 1974/1975 in Machakos district which indicated, that in the early period of adoption of hybrids, farmers were still experimenting with these varieties. She noted a considerable variation in the number of seeds planted per hole. In addition, there was a huge variation in mode of planting: some planted as recommended in rows, other did not.
- 9 For more details see AIR/World Bank (1985), Annex I and the IRS- surveys.
- 10 Ibid., Vol. 1. Main Report, chapter II, p. 10.
- 11 See Melkote (1988).
- 12 Ruigu et al. (1985), p. 6.
- 13 Ibid., p. 8. One of the reasons was that credit was made available but input supply was not well organized and payments by the marketing boards were frequently delayed.
- 14 Between 1953 and 1984, food aid under the US PL480 programme represented \$ 128.5 million, i.e. 7.9 % of total US aid to Kenya. Data from Miller (1984), p. 142.
- 15 The difference between these hybrid varieties is based on maturity classification, length, rainy season range, altitude range and type of crossing (single, double and triple). The hybrids were released in different years. The first released hybrid was H622 in 1964, the last hybrid (H614D) was released in 1988.
- 16 The Farm Management Handbooks (1982), several volumes.
- 17 See World Bank (1984), p. 245 on Maize yields by district and zone, 1975-1979, based on surveys conducted by the maize board and MOALD.
- 18 For a detailed account of the Kenya Seed Unit Project, financed by Dutch Aid see the following reports: NSQCS (1973, 1982, 1983, 1985).
- 19 Although 'a specific target group was not identified at project preparation or during implementation. Towards the end of 1970s the funding authorities (a.o. the Netherlands government, p.h.) developed an interest in reaching small farmers. This interest has, however, not been translated into NSQCS policy or practices, since quality control cannot be carried out differently for either small or large farmers.' See NSQCS (1983), p. 4.
- 20 Ibid., p. 17.
- 21 Gerhart (1976), p. 56.
- 22 AIR/World Bank (1985), vol. 1. Main report, chapter II.
- 23 Ibid., p. 13.
- 24 See Gerhart (1976), pp. 258-270. Interviews and discussions with several civil servants of MOALD in August 1985 indicated that MOALD supports Gerhart's positive view.
- 25 Ibid., op. cit., p. 269.
- 26 See Ndegwa Report (1982), Sessional Paper no 1 (1981), World Bank (1984), pp. 82-90 and particularly Grosh (1986) for a detailed review of the financial performances of agricultural parastatals since independence.
- 27 See World Bank (1984), pp. 143-176.
- 28 World Bank (1984), p. 83.
- 29 See a.o. Mosley (1986a), p. 110, Peterson (1986), pp. 68-72; and Melink (1987).

30 See Economic Survey (1989), p 97
 31 Melink (1987), p 25
 32 See Melink (1987), pp 23-38, for a summary of data
 33 See Schmidt (1979) and Heyer (1976)
 34 National Food Policy Paper (1981), p 6
 35 See Kliest (1985) for an overview of regional shortages in maize
 36 See World Bank (1982, 1984)
 37 See Schmidt (1979), pp 132-143 for an in depth account of the effect of marketing and pricing controls
 38 See Peterson (1986) p 69, 70, tables 4.2, 4.3 and 4.4 Peterson also detects in this respect a bias against food crops in favour of export crops. Large farmers receive 91.4 % of the world market price for their coffee, while smallholders receive 62.4 % of that price for theirs
 39 One of the conditions for USAID's partial financing of Kenya's fertilizer imports is that such imports have to be channelled through private trading channels (USAID, Nairobi office interview, August 1985) See also Mosley (1986a), pp 113 ff
 40 Mosley (1986a), p 112
 41 Mosley (1986a), p 113
 42 Ibid p 112 Bookers recommendations are in line with government objectives, see Chapter 3
 43 Economic Survey (1989), p 97
 44 See Melink (1987), pp 18-24
 45 See a o Jabara (1985), p 620
 46 Economic Survey (1989), p 97
 47 Mosley (1986b), pp 516, 518
 48 Davis (1983), p 123 See also Cowen (1986), p 368
 49 Leys (1978), p 253 Important for the mid-1970 period is the fact that capital obtained from the illegal coffee trade from Uganda, instigated by the much higher coffee producer prices in Kenya, was considerable Kisumu based traders in particular must have benefitted from this illegal trade It is significant that when the illegal trade terminated in the late 1970s by actions of the Ugandan state, private accumulation of capital and investment in industry and commerce slowed down considerable in Kisumu town
 50 Bevan et al (1989), pp 39-43
 51 This is confirmed by Bevan et al (1989), chapter 6
 52 Cowen (1986), p 370 and Economic Survey (1983), p 120
 53 NRC-Handelsblad, 20-11-1989
 54 Cowen (1986), pp 374 ff and Cowen (1983), pp 218, 219 Cowen used the two-year maize consumer price index 'to smooth out the irregularities of climate and price changes at the beginning of each year' (personal communication) The maize consumer prices are the Nairobi-market prices of maize consumed as grains The Nairobi maize price was taken because these are the only prices available as well as that these have been recorded since long The price of maize as grain was taken since most rural households purchase grain which is grinded in local grainmills
 55 Cowen (1981b), pp 64-66, Cowen (1983), pp 218 ff and Cowen (1986), pp 371 ff
 56 Economic Survey (1983, 1989)
 57 See also Melink (1985), p 21 and Sharma (1983), p 143 ff
 58 World Bank (1984)
 59 Schmidt (1979), pp 141-143
 60 The press, for instance, reported that underutilization of agricultural land is commonplace in the estate areas while there are landless people in the country looking for farm land (see *The Standard*, 8-4-1983, quoted in World Bank 1984, p 177) Land underutilization in the large farm sector is, however, nothing new in Kenya's history Before and after independence, the large farm sector has always been characterized by underutilization of land Holding sizes were often much larger than the managerial capability could cope with In addition, many estate producers are really speculators holding land not out of commitment to farming but simply because land ownership per se is a sound investment. See Leys (1975), Large Farm Sector Survey (1977) and personal communication with Dick Foeken (April 1990)
 61 African Business, August 1986 What kind of steps to be taken were not indicated in the Sessional Paper no 1, 1986, on Economic Management and Renewed Growth

62 See Mwangi (1978), p 41 and AIR/World Bank, Vol 1 Main Report, chapter II, pp 14 ff and Annex I, p 5

63 Buch-Hansen & Kieler (1983), p 31

64 Jabara (1985), p 613

65 Meilink (1985), p 22

66 Hopcraft, P, Industrialization, Balance of Payments and Trade Policy in Kenya the effects of protectionism and government intervention on prices, export and income distribution Nairobi, Institute for Development Studies, University of Nairobi, 1979, quoted in Meilink (1985), p 22

67 See a.o Carlsen (1980) and Chapter 4, section 4.5.2.1

68 See ISNAR (1981, 1985) and Juma (1989), pp 181, ff for an historical account of agricultural research in Kenya

69 See a.o Huxley (1957) and Brown (1968)

70 World Bank (1984), pp 135-140

71 Ibid, table 6.2 pp 136, 137

72 See ISNAR (1981)

73 for more details see also ISNAR (1985)

74 See, for instance, Heyer & Waweru (1976), p 202 ff and House & Killick (1983), p 55

75 This was noted by a consultants mission Gibbon, D, Morris, J & Jones, R (1983), *An evaluation of the Maize Agronomy Research Project Kenya*, London, Overseas Development Administration Evaluation Unit, quoted in Mosley (1986b), p 521

76 Juma (1989), p 188

77 Heyer & Waweru (1976), p 204

78 Ahmed & Kinsey (1984), p 37 ff

79 See also Heyer & Waweru (1976), Cox (1984) and Hunt (1984)

80 This makes what Latour (1981) wrote 'Give me a laboratory and I'll raise a world' increasingly true

81 Heyer & Waweru (1976), p 204 The World Bank also noted the institutional weakness in the linkage between research and dissemination of results to the farmer The Provincial Research Advisory Committees (PRACs) were established with the intention of overcoming these difficulties and of strengthening linkages between the farmer and research stations These committees, however, have been largely inactive

82 These shortcomings of Kenya's agricultural research system were again highlighted in ISNAR (1985) One of ISNAR's major recommendations was to propose to the government to establish farming research programmes based on regional research centres, the activities of which should be directed at identifying materials and methods that are most relevant to specific target groups in the region where these centres will be established The regional centres would give a feedback on the orientation of the research activities of national research centres See ISNAR (1985), pp 30 ff

83 In Chapter 2 we emphasized the influx of new maize cultivars (such as Hickory King, Yellow Maize, East African Flat White, etc.) from various sources and persons.

84 Juma (1989), pp 184, 185

85 Ibid, pp 184-186

86 Ibid, p 190

87 Some farmers in Nandi district made it clear to me that the local maize varieties were preferred above hybrids because of the taste Some, therefore, still cultivated some local maize, although in such small quantities that they could not quantify it Fris-Hansen (1988) noted, for instance, in Tanzania that farmers produce local maize for subsistence and hybrids for the (urban) market. For a detailed account of bean selection and production system in Uganda, see Ntagi (1990)

88 Greer & Thorbecke (1986) raise this question for instance

89 See McGuire (1981)

90 See Heyer (1975) and Senga (1976), p 103

91 See World Bank (1984), pp 141, 142

92 World Bank (1984), pp 120, 121 and also Livingstone (1986), pp 211, ff

93 World Bank (1984), pp 121, 122

94 Hunt (1984), p 96

95 See also Gillette (1980) and Melkote (1988) Adoption of the package as a whole is evaluated as risky by the small scale farming population and therefore not adopted but adapted

- 96 See IRS-IV, tables 7.26, 7.27 and 7.28. These data show clearly that household heads with no schooling are less likely to be visited than those who have received formal education. The extent of formal education depends mainly on socio-economic position.
- 97 The ILO-Report (1972), pp. 153 noted that it was deliberate policy in the 1960s not to give advice to women farmers. The simple assumption was that male farmers were expected to be more responsive to extension advice. See Safilios-Rothchild (1990) for a critique on these kinds of assumptions as well as for an assessment of women's contribution to agricultural production.
- 98 Leonard (1977), p. 173 and also Heyer & Waweru (1976), pp. 205-209.
- 99 Ashcoft, et al. (1970), p. 32. Hunt (1977, 1984) reaches the same conclusion. See also Wyeth (1981).
- 100 See Leonard (1977), pp. 177-192 for a summary of his argument and major findings.
- 101 Wyeth (1981) noted that settlement schemes received more attention from MOALD's extension service than the areas where settlement schemes were not implemented. See also Chapter 4 where this point was also raised.
- 102 Leonard (1977), p. 188, labels this as the 'squawk' factor. This factor means that the 'progressive' farmer are the ones most likely to complain to a senior officer if extension is not provided to them. They believe that they have the right to demand services because the social and political structure gives them privileged access to everything else. In this respect, the squawk factor is rooted in the class structure in Kenya.
- 103 See Steeves (1978) and Bager (1980). In Kenya, the tea producer is mainly a small scale producer with an average of 0.38 ha under tea.
- 104 Haumann (1990) and personal communication.
- 105 Information obtained from the managing director of Standard Bank, Kapsabet branch October, 1987. See also World Bank (1984), p. 128. The emphasis of the state on imposing regulations on these private financial institutions is clear from the fact that the majority of credit outstanding is from private institutions. In March 1983, the commercial banks's share (including the Central Bank) of credit outstanding was 49 %, private non bank institutions issued 18 % of the loans, while AFC's share was 20 %. The remaining (20%) was issued under the heading of the New Seasonal Credit Scheme (on lent by CBK and AFC). The share of then still existing KFA was 1 %. See AIR/World Bank (1985), vol. 1. Chapter IV, p. 15.
- 106 See Collier (1983), p. 13-166, Collier & Lal (1984), p. 1010.
- 107 Peterson (1986), p. 73.
- 108 Development Plan 1974-1978, p. 212, cited in Smith (1976), p. 132.
- 109 Heyer (1976), p. 354.
- 110 Heyer & Waweru (1976), p. 208 and Heyer (1976), pp. 353-360.
- 111 Leys (1975), p. 105.
- 112 African Business, February, July 1986. How the KNFU came to the rescue was not indicated.
- 113 African Business, July, 1986.
- 114 Leys (1975), pp. 99 ff. The withdrawal of the GMR scheme might be an indication that their political influence is diminishing as is suggested by Cowen (1986). See also Chapter 8.
- 115 See, for instance, Statistical Abstract (1984, 1986) tables 136 and 137.
- 116 World Bank (1984), p. 128.
- 117 World Bank (1984), p. 128 ff, Leys (1975), pp. 99 ff and Wyeth (1981), p. 305.
- 118 Okoth-Ogendo (1981), pp. 333, 337.
- 119 Peterson (1986), p. 74.
- 120 Von Pischke, *The Political Economy of Farm Credit in Kenya*, Glasgow, 1977, quoted in Peterson (1986) p. 73.
- 121 Whether capital loans for investment in commerce and manufacturing has increased since then is, however, unknown.
- 122 AIR/World Bank (1985), vol. 1. Chapter IV, p. 15.
- 123 World Bank (1984), p. 128.
- 124 See, for instance, Livingstone (1986), pp. 197-211.

CHAPTER 8.

AGRICULTURAL POLICY IN RETROSPECT: THE STATE AND STATE-SOCIETY RELATIONS IN KENYA

Introduction

The preceding chapters examined various components of agricultural policy, how these were implemented by the state and the general effect on agrarian change since independence. Chapters 4 to 7 elucidated the thesis that there exists in Kenya a deviation between policy objectives and implementation. Various instrumentalities of the state either were inefficient, and therefore characterized as ineffective, and/or were distorted during the implementation phase. Institutionalization on the part of various state institutions in Kenya was for this reasons seen as maintaining selective and severely biased relations with the various classes and groups in the agrarian society. The backbone of agricultural policy, institutionalization and commoditization, generated various rhythms of agrarian change generating and reinforcing economic and social differentiation in the rural areas.

In this chapter we shall attempt to construe why the effect of the various means and instruments of state intervention in agriculture deviates from the alleged objectives. The point of reference is the processual level. Chapter 1.4.1. indicated that policy development does not take place in a political vacuum; decisions regarding state intervention in agriculture are made and implemented within a socio-political framework in which many interacting relationships are at play. An important question in this respect is *'who is in command of the state in Kenya ?'*, and *'what have they done with that power ?'*.

An answer to these questions involves several components. The first section focuses on a politico-economic framework for analyzing state intervention. We also attempt to identify the way the state bureaucracy categorizes the farming population. The second section elaborates on state-society relations since the late 1950s. In the third section we return to the efficiency and effectiveness of state intervention in agriculture and bring state-society relations in the implementation of policy back into the picture.

8.1. An analytical framework

An analytical framework must encompass at least five aspects. The *first* is that the state apparatus has not been built overnight, neither were the functions of the state. The state, during the colonial period and ever since, tremendously expanded its functions and power in the rural sector with object of gradually creating the essential preconditions for commodity production and commodity relations which could ensure its expansion. For reasons dealt with in Chapter 2, however, more than 60 years of colonial rule had elapsed before the real boom in commodity production occurred with extremely high growth rates, although growth stagnated significantly again since in the late 1970s.

The main instrumentalities of the state in Kenya have been examined in Chapter 3, sections 3.2. and 3.3. Important for the Kenyan context is that

instead, of constituting itself as a large producer of agricultural commodities, the state preferred to leave commodity production to be organized by numerous household producers and a limited number of estate producers and plantation owners. The *economic* functions of the state in agriculture are thus primarily oriented towards facilitating accumulation, rather than accumulating capital itself.¹ State revenue derives, therefore, to a large extent from taxes levied on the marketing of agricultural production, export and import trade. State control over marketing is viewed as essential to maintain the income position of the state in order to pay the wage bill, to expand its investment funds for industrial and agricultural development and gain access to and maintain foreign exchange reserves.²

A *second* aspect of the state is that the basic state functions created in the colonial context by the colonial administration were also incorporated into the post-colonial state apparatuses. The newly independent state inherited the branches of governance and instrumentalities of the colonial state. The post-colonial state extended - geographically as well as in terms of an increase of state institutions and state bureaucracy - its economic and political functions in relation to the creation of conditions for extended accumulation of capital by the indigenous capitalists in agriculture and other sectors of the economy. It also opted for the integration and mobilization of numerous household producers in a nation-wide project to enhance commodity production for the internal and international market, Chapter 4 has shown, however, that the benefits of such policy were restricted to only a few regions, about 60 % of the smallholder population and the large farm sector.

In that sense, the post-colonial state continued to facilitate the two rhythms of agrarian change in Kenya which emerged after the 1950s and to mediate between the interests of the dominant classes and groups in the power bloc of the state and other sectors of Kenya's society. Thus an understanding of state-society relations is essential for an understanding of agricultural policy formulation and implementation.

A *third* aspect is that the state performs its functions with much vigour. The state was first of all forced by certain interests groups in the country to perform these functions. In chapter 2 it was indicated that, during the first period of colonial rule, foreign estate companies and white settlers represented the dominant political and economic forces in Kenya. The state was forced to take several measures creating the conditions for new forms of commodity production: to supply land and labour to the settler community and foreign estates and to force the African population into the wage-labour market and into the monetary economy. After independence when the state was Africanized, state power was used by indigenous capitalists to gain access to settler-owned land.

Secondly, the state performs these functions because of the absence of others who might be in a position to perform them. The state uses its legal and executive powers to guarantee the operation of various commodity markets, not only to protect its own income position but also because it saw the necessity of guaranteeing producer benefits and to protect consumers. Perhaps more importantly, the state has the objective of preventing the concentration of essential food trade in the hands of private Asian traders. The latter point is, however, rarely voiced officially in state circles.³

The state performed these functions because, in the state's perception, society is inadequate to do so. The legal power, as well as the knowledge and capital funds to perform crucial tasks in establishing the administrative and technological environment for agricultural production, became therefore concentrated in the state. Road and railway construction and the organization of agricultural research was, and still is, taken care of and funded by the state. Finally, and although there is an active local trade in food commodities, many state officials believe that the private sector has inadequate experience and funds to organize and expand trade on a national and rational scale.

The *fourth* aspect is related to the state bureaucracy and to the classification schemes they use to identify the social elements of the agrarian structure. Any one reading agricultural or national development plans will recognize or discover a touch of egalitarianism in policy objectives. These plans point out clearly that state intervention is needed to create solid economic conditions for growth as well as to create legitimate social conditions for commodity production. Apart from price incentives and productivity increases, the state is particularly committed to protecting individual property rights to land, to avoiding land speculation and ensuring that production inputs, markets, capital and extension services are available to every farmer in Kenya. Irrespective of whether the farmer is large or small, rich or poor, they should all have their fair share of resources and of state services and funds. Leys (1978, 1979b) noted that current policy thinking within the Kenyan state bureaucracy favours the expansion of small-scale production based on high output and high labour inputs.⁴

These more or less egalitarian objectives seem to be in contrast, however, to concepts or categories used by policy makers to order the agricultural population. They comprise implied, but not always plainly expressed, twofold and sometimes manifold criteria: large farm sector-cooperative sector-small farm sector; large-scale farms-smallholdings; large farmers-smallholders-poor farmers-landless rural workers-pastoralists; progressive farmers-non progressive farmers; farmers cultivating high potential land-farmers cultivating low potential land; (labour)intensive-(labour)extensive.

Although these classifications contain a wide range of farms and farming styles, they have a few characteristics in common. To start with, the quantity and quality of the economic resources of the agricultural population are the starting point for classification. Secondly, the options for economic growth are reflected in the classification and appear as the structuring and guiding element for policy making and implementation. Policy makers in Kenya, like their counterparts all over the world, use economic rationales for their programmes, economic rationales which are mirrored implicitly in their classification schemes. While the resulting plans increasingly highlight the need for policy re-orientation and while simultaneously more data (collected by the state itself and by independent research reports - on estate production, small-scale agriculture, household production and rural poverty issues which could function as a basis for policy alternatives) become available, the underlying classification criteria are not modified. There has been little or no attempt by policy makers to go beyond the large farm - small farm categorization. This is not only rampant in Kenya's policy papers, but also in policy papers and project and evaluation reports of foreign aid agencies.

The *fifth* aspect of state functions in the realization of the concrete conditions for commodity production is that Kenya, like almost all other African countries, is an import-dependent economy. Kenya is firmly integrated into the international capitalist division of labour as an exporter of agricultural commodities and an importer of production inputs, capital funds and agricultural technology.

The majority of agricultural production inputs are imported. This holds true for fertilizers, mechanized equipment and agro-chemicals. The only exceptions are (improved) seeds, hand tools and ploughs which are produced locally. Agricultural R&D depends largely on participation in international agricultural research networks. Capital funds for investment in R&D, road building and infrastructure, for development projects and securing imports (obtained through balance-of-payments support) as well as capital needed for investment in agricultural production are partly but increasingly procured by financial assistance from multilateral and bilateral aid agencies. This implies that the establishment as well as the maintenance of commercial, financial and foreign aid relations are relevant for the measure of success of state policies. The securing of the continuous integration of Kenya into the capitalist division of labour ('the world system') should also be considered as a function of the state.

8.2. Political intervention and state-society relations after independence: the nature of state power

An analysis of the demarcation the state's economic functions cannot be carried out without examining the society upon which the state as a concrete matrix of institutions rests.

This requires, first of all, an answer to the question 'who came to power' after independence was achieved in the early 1960s. This is illuminated by a retrospective view on the characteristics of pre-independence politics. An understanding of leadership is an essential ingredient for the interpretation of African politics. African politics had been organized from 1919 around associations, although the LNCs provided the real and effective arenas for articulating discontent between 1924 and 1957. The LNCs were the arena where much anti-colonial radicalism was articulated by the *watu wa mission*, the educated strata of the African population. The national political movements, in formation after the major policy reforms were implemented in the 1950s and when the need for a long-term solution became increasingly overt, can be seen as the heirs of this nationalist ideology. These political movements (Kenya African National Union [KANU], Kenya African Democratic Union [KADU] and the later formed opposition party, the Kenya Peoples' Union [KPU]), can at best be portrayed as movements trying to mobilize regional political leaders into working political alliances. The parties were arrangements of local leaders established for the purpose of capturing and retaining state power. Coalition building by leaders was the basis of party organization. There were the leaders of the factions who had considerable experience with political representation in LNCs and in the Legislative Council during the colonial period. There were also leaders whose leadership was, above all founded on articulation of local interest groups.⁵ The first grew out of the official political arena, the second type of leadership emerged out of representation of interests.

The KANU-coalition and the KADU-coalition, which contested each other in the pre-independence elections of 1962, were accordingly mixtures of several ideologies with one objective in common: Uhuru (independence) through the maintenance of the free enterprise system. Despite this shared objective, KADU and KANU were rival parties. KANU, led by Kenyatta and Odinga, was in favour of a unitary government after independence. KADU, led by Arap Moi, advocated a federalist government. Furthermore, KANU was primarily a party of the Kikuyu, Embu, Meru, Luo and the Kamba. KADU was a grouping of notables of the Kalenjin people of the Rift Valley and some of the neighbouring Luhya, of the Maasai, of the Taita and of the various peoples of the Coast. Although the latter were less numerous, they had more land and livestock but less education and less experience of wage labour, cash-crop agriculture or trade than those whose leaders formed KANU. KADU was a defence coalition to counter ethnic and political domination KANU after independence. They particularly feared Kikuyu acquisition of land in the Rift Valley under a KANU government.⁶ Anyang' Nyong'o (1989) stresses, contrary to Leys' (1975) view on this issue, that both KANU and KADU contained elements of radicalism as well as conservatism. The land issue makes this clear:

'(...) on both sides there were those who represented very poor constituencies, very land hungry constituencies, who felt that neither the KADU approach (i.e. regional authorities in control over land transactions after independence, p.h.) nor the settlement scheme approach (of some sections within KANU) would satisfy their supporters. There were also those who, for ideological reasons, believed that a land policy based on the regulation of market forces was unjust to the poor and landless and that the government had to take a much more radical posture after independence in acquiring land and distributing it free to the landless.'⁷

Both parties were in an arena of politics where faction leaders 'collide' and 'collude' in their enduring struggle for power. The political basis of competition has been the hierarchy of patrons and political parties established in the rural areas since the mid-1950s. Not only did factionalism and patronage over their followers ('constituencies') determine the fortunes of individual leaders, but they have also been the foundation for ethnic and regional competition and tribalist ideology which have been the primary mechanisms of political control over the countryside.⁸ The nationalist coalition of leaders who came to power after independence was thus a fragile alliance with different ideological factions taking part in that alliance. The fragile nature and loose structure of the 'historical bloc' explain the ease with which individuals, interests groups and even whole parties shifted their affiliations from one party to another in the period immediately prior independence.⁹ But the factional and ideological divisions did not emerge until after independence.

Apart from the material and ideological differences it is for the Kenyan context very significant to recapitulate that members of the ruling class - nascent and transformed during the pre-colonial and colonial episode to become a group of embryo-indigenous capitalists - were the initiators of a political process to gain independence and the leaders of nationalist movements.

This position placed them in a strategic position for taking control of the state after independence. Leys (1979b) stresses that:

'What is crucial to an understanding of the development strategy of the 1960s and 1970s is that it is not inspired by the interests of (a petty-bourgeois, p.h.) class, but by a class of African capitalist proper, however modest and economically weak, relative to foreign capital, it may have been at independence.'¹⁰

The indigenous capitalists became a ruling class who had access to the power functions of the state and whose interests were reflected in the state apparatuses. Apart from economic power as a consequence of the relatively large scale of capital accumulated by the indigenous capitalists before and shortly after independence, Leys pointed out that it had a further highly significant asset: accumulation of capital

'was heavily concentrated not only in the largest ethnic group (the Kikuyu, p.h.) (...) but also in the economic and political centre of the country (Central Province, p.h.). Combined with its strong representation in the state apparatus (due to its heavy investment in education in the colonial period, p.h.) the indigenous bourgeoisie was exceptionally well placed to convert its natural dominance in the nationalist movement into a position of strategic control over the post-colonial realignments needed for the next phase of accumulation. By mid-1966 (...) these realignments (i.e. the merger of KANU and KADU, and the formation and subsequent banning of the opposition party KPU, p.h.) had been completed and the framework for an effective "power bloc" under the hegemony of the Kikuyu bourgeoisie was clearly established.'¹¹

Although elements of the intermediate strata were part and parcel of the nationalist alliance for independence, they never became - at least during the immediate post-independence period - firmly entrenched as a political force in the power bloc. The petty-bourgeoisie was subject to the hegemony of the ruling class.

The major events after independence which structured the formation of Kenya's agrarian (infra)structure centred around ideological and political disputes between these two factions of the nationalist alliance for independence. Gaining full political and economic control over state power was the essential stake for the struggle. This happened after KANU became the only political party. KADU was dismantled in 1964, integrated into the KANU-party structure and leadership, and KADU-leaders took part in the KANU-government led by President Kenyatta and vice-President Odinga. One faction, i.e. the predominant one within KANU, was led by Kenyatta and Mboya, minister of Economic Planning in the cabinet, a former trade unionist and Secretary General of KANU, who represented the interests of the indigenous ruling classes. Their ideology was 'right-wing' and capitalist. Kenyatta served as a role model to the first faction: the cabinet and the inner-president circle (the so-called 'Gatundu Courtiers'), who proceeded like Kenyatta to acquire vast urban property and estates in the former White Highlands, the Coast. For this group, as one cabinet minister has put it in 1982, 'Uhuru is sweet'. Straddling was legalized by a government commission in 1972.¹² This could only occur, however, when Mboya was literally removed

from his position since he had argued that the state should manage capital accumulation but not to be used as a means of private accumulation by those who held positions in state institutions. Mboya differed greatly in this respect from Kenyatta while they shared the ideology of capitalist development. Mboya was murdered in 1969 as a result of a conspiracy involving people who were very close to the President.¹³

The other faction expressed a more 'left-wing' and typically petty-bourgeois, populist ideology. This faction was also active within the KANU party structure. Odinga, the supreme leader of the Luo community was the central man of this faction. They called in public and in parliament for a general redistribution of resources. Odinga frequently accused Kenyatta of being a 'land grabber'.

In the ideological sphere the right-wing faction, though it is better to speak of the Kenyatta-Mboya faction, took a lead over the populist faction in Kenya. They increasingly used the state media to assert that they were for progress while the others were anti-development. More importantly, they attempted to impose political hegemony by the publishing of the *White Paper* entitled *African Socialism and its Application to Planning in Kenya*. This paper became the ideological cornerstone of future economic developments in the country. The paper was not only a blueprint for capitalist development and controlled state participation and intervention in the economy; it took the wind out of the sails of the populist faction.¹⁴

These ideological disputes, which were nothing more than a political struggle for control of the state, reached a culminating point in 1966 when Kenyatta-Mboya succeeded in their attempts to manoeuvre their rival faction out of KANU leadership. Odinga's faction replied by forming an opposition party, the Kenya Peoples' Union (KPU). KPU became the political party in which petty-bourgeois interests were largely organized. KPU was a party of populists who derived their political legitimacy from the support of the 'small man'. The KPU was also the party of those who continued to disagree with the economic policies pursued by the Kenyatta-Mboya faction. KPU was, however, politically marginalized and banned in 1969. Most of the leaders were not allowed to re-enter the national political arena.

KPU's banning was accomplished by Kenyatta-Mboya commanding state power to intervene in the political organization of Kenya's civil society. Atieno Odhiambo (1988) points out the two consequences of state intervention in the political sphere. The state tacitly made political expression outside its own chosen agenda a criminal offence rather than a political difference of opinion. Secondly, following from the first, it is the state that initiates political dialogue, and public discourse has become a monopoly of the state.¹⁵ Those who from time to time raised other political issues (such as Odinga did during the 1960s and in 1982 and the more recent events on the political scene in Kenya) continually run into difficulty with the state. These events represent for Atieno Odhiambo a watershed in the political organization of Kenya's society: competitive politics was replaced by political detentions and political assassination.¹⁶

The political weight of the indigenous bourgeoisie in the state apparatus was strengthened during the Kenyatta presidency by the fact that the higher echelons of the state bureaucracy, ministers and assistant-ministers and senior presidential advisers were straddling political positions and private

accumulation. The majority of these bureaucrats, together with the Kenyan senior managers of foreign firms, became partners and directors of new companies.¹⁷ Swainson (1980) pointed out that, in addition to that, numerous networks of interlocking directorates came into being between members of the ruling classes, high ranking civil servants and persons occupying important positions in foreign companies.¹⁸ This development nourished the formation of strategic alliances between the state, the Kenyan bourgeoisie and foreign capitalists. These alliances had a particular nature. They were forged by the state through its exertion of control over foreign investment in the interests of indigenous accumulation. The state fended off forms of foreign investment which would pre-empt local capitalists in estate agriculture and other potential sources of accumulation.¹⁹

A crucial political factor contributing to the coherence of the state was the centrality of state power. Administrative control over the country was achieved through the civil service rather than through the ruling party KANU. KANU declined rapidly as an political agency while the size of the state bureaucracy greatly increased. The political positions within the KANU-party structures which could be identified with petty-bourgeois interests were accordingly shunted on to a siding. The state became a heavily centralized apparatus during Kenyatta's rule as regional assemblies were abolished and about 80 % of county council budgets were transferred to technical ministries.²⁰

Kenyatta and the ruling group surrounding him, which remained remarkably constant up to 1978 (the year Kenyatta died), exercised full control over district and provincial affairs through the technical ministries, and particularly through the Office of the President (OP). Moreover, with the revitalization and creation of new parastatals, there was a tendency for the president to staff top posts mainly with people of Kikuyu origin. This contributed to direct loyalty of the state bureaucracy to the president, himself a Kikuyu, and to increased political stability and patronage. The final result was a concentration of economic and political power and the direct affiliation of the real political power of the ruling classes with the presidency and the OP.²¹

A second, but nonetheless equally crucial political function of the state and Kenyatta's leadership was the political integration of the 'masses of the population' or the peasantry or the 'non-capitalist classes'. Lamb (1977a, 1977b) has shown this process in great detail. KANU leadership was crucial for the political integration of the peasantry. Control over local resources was transferred out of the hands of local politicians into the hands of the central state bureaucracy, thereby depriving the local government of its sources of patronage. Patron/client relations were substituted by direct relations between the peasantry and state institutions. It involved the energetic propagation of an ideology of tribal competition, rural development and authoritarian menace with political and administrative practices. The state and the ruling class would like peasants to believe that improvements in their lives depend on competition for scarce resources which are all in the hands of the state. The state was in a position to reward 'good' performing districts with government finance for development projects and to punish 'bad' performing districts with deprivation of resources. These messages were expressed in many of Kenyatta's speeches.²²

Lamb and Njonjo (1977) correlate this with the establishment of an ethnic and class alliance which facilitated an obstruction of the organizing work of the opposition party, KPU, in the rural areas, and particularly in Central Province during the late 1960s. When KPU leaders tried to activate peasants in one of Central Province's districts, Murang'a, on the land issue, the moves were immediately neutralized by Kenyatta distributing tiny pieces of land to the peasantry in the district.²³ Njonjo argued that the stability of the Kenyatta period is to be explained by Kenyatta's ability continually to give priority to property rights above any other right. When independence made room for redistribution of white-owned land, large numbers of individuals acquired, and demanded, the right to private property, to own estates and the right to form family plots.²⁴

The political alliance between the ruling classes and the peasantry was cemented by an ideology of property ownership held by both parties involved. The alliance contained specific redistributing elements. Self-help programmes (*harambee*²⁵) were encouraged by Kenyatta and his allies.²⁶ Frequently, Kenyatta urged members of the bourgeoisie to forge relations with the masses of the people. Financial donations by them and their 'friends'²⁷ to *harambee* projects undoubtedly spawned the idea that the 'big men' (members of the ruling elite) contributed to the well being of the 'small men', that is, the masses of the people living in the countryside and urban squatter settlements.

Harambee, however, also involved popular involvement and has been no small political and economic resource to the peasantry. Holmquist (1984) and Barkan & Holmquist (1986) maintain that it is a mistake to view self-help simply as a tool of any particular segment of society. He stresses that, through the mechanism of self-help, there exists within the framework of top-down patronage relations a certain political space and leverage for the peasantry. Harambee was a asset available to the peasantry, forcing the state's hand into areas and economic sectors that it did not find optimal. Holmquist iterates, however, that despite local initiative, leadership and latitude for a great deal of local decision-making - although it appears that community participation in projects tends to be uneven²⁸ -, there is often also external leader ideas, guidance, financial assistance and occasional control. Self-help is, furthermore, constrained to fit into a broad outline fixed by the state of what constitutes a 'proper project' in order to receive investment funds from the state for schools, dips and dispensaries. And, when the state is funding, a good deal of local control is lost in the process. There is also evidence that self-help projects are extremely viable elements of the strategies of politicians to establish and maintain their legitimacy in 'their' district. The survival of MPs and local politicians often depends on the support they arrange for state funds for local self-help projects.²⁹ Self-help is thus not completely dependent on the local community, nor on outside sources. In this sense, self-help is contradictory.³⁰

The functions of the state, designated in Chapter 1 as the integration of the different sections of the ruling class and the political and economic integration of the peasantry, are reflected in the state's economic strategy. Chapter 4 has demonstrated this clearly.

8.2.1. The politico-economic determinants of state intervention: state-society relations

The transfer of state power after independence to an independent government was thus accompanied by many fundamental changes. The European exodus after independence facilitated by the British state made room for land redistribution programmes. These were implemented to give landless and unemployed Africans, smallholders and the indigenous capitalist class access to settler-owned land. The drive to maintain a bimodal agrarian structure, that is, in the state bureaucracies vocabulary, to maintain the large farm and small farm sector, was a central issue of state policy. The first *Development Plan 1966-1970* provides an extremely clear example of this. Large- and small-scale farmers and landless people should have a fair share of resources and of state agricultural services.³¹ Political as well as financial-economic considerations underlie the formulation and implementation of various redistributing programmes.

The transfer of state power was almost immediately followed by the Africanization of the state apparatuses. The state bureaucracy turned out to be highly responsive to political pressure exercised by the indigenous capitalists. The political domination over the state in the period immediately after independence by interests groups and individuals with aspirations to become large land owners, induced a strategy of 'transfer intact' of the White Highlands. Swainson (1980), Leys (1975, 1978, 1979b) and Cowen (1986) and many others have shown that state power was increasingly used to dismantle the existing barriers for the accumulation of capital by the indigenous capitalist class in agriculture, industry and commerce, and to restrict foreign investment.

The transfer of state power and land redistribution was dominated by a concern shared by both the British and the new state, as well as by the 1963 World Bank mission, to avoid a collapse of the large farm sector. At the time of independence, the large farm sector produced after all the bulk of marketed production. Maintaining this sector was considered as crucial to the Kenya economy.³²

The movement of African capital into the White Highlands, which had already begun in 1959, was an additional concern for the independent state. The new occupants of the White Highlands lacked the essential skills to manage their new holdings. Underutilization of prime agricultural land in the former White Highlands due to lack of capital and skills was detected by a consultant report in 1977 as still widespread.³³ It was only with government financial assistance provided by the Land Bank that many individual Africans were able to buy large farms. The AFC later provided them with capital to meet capital requirements. The new occupants of the Highlands needed as much privileged state support for capital, services and knowledge to manage their farm as their predecessors did.³⁴

Before independence it is accurate to state that foreign and local, Asian enterprises dominated the industrial and commercial sector. Since independence, however, the African entrepreneurs and the state cooperated jointly to break down the barriers to accumulation in industry and commerce. The newly independent government asserted the need for it in its 1965 statement of economic policy. These objectives are formulated in the *White Paper*.

Indigenous capitalists used the state in a number of ways to gain access to the industrial sector. They were assisted financially as well as administratively by parastatals (Kenya Industrial Estates, Industrial and Commercial Development Corporation) and the Commonwealth Development Corporation, a British financial institution which has operated in Kenya since colonial times. Additionally, foreign investment in industry was restricted and more difficult than before: from now it had to take the form of joint-ventures with indigenous capitalists.³⁵ Cooperation with non-African enterprises is essential for indigenous capitalists to gain access to technology; and in particular it is required for those in manufacturing.

As a result, investment of local, African capital in industry increased after independence. It was partly a result of the purchase of settler shares in industry and partly caused by state protection. The majority of industrial production is however still undertaken by foreign firms. Leys (1978 estimated the figure to 80 % for the year 1977. He stresses, in addition, that by that year a significant degree of penetration of indigenous capital in construction, financial services, insurance, mining and, most important of all, in manufacturing was already set in motion.³⁶

After independence, the ownership structure in commerce also changed radically. The dominant position of Asians in this sector was increasingly challenged by African capitalists. Africans obtained better access to political means of gaining a foothold in the commercial sector of the economy to the disadvantage of other racial groups. The Trades Licensing Act of 1967, for instance, excluded non-citizens from trading in the rural areas (many Asians were not registered as citizens). The Kenya National Trading Corporation (KNTC), set up as an agency to take over import-export trade, came to be used more as the primary agency for the Africanization of distribution in Kenya. From 1967 onwards, the KNTC has been used by indigenous capitalist to accelerate their move into wholesale and retail trade. The Chamber of Commerce became the spokesman of these aspirations. Public investment funds were mobilized (o.a. by means of extending business credit to African traders) to support the entry into commerce.³⁷

Leys, Mohiddin and many other commentators on Kenya's development strategy after independence portray the *White Paper* as the ideological and political bedrock for a continuation of policy and patterns of development laid down since the 1950. They argue that there was no intention at all at that time in Kenya to attempt a break from the inherited colonial and capitalist economic systems. The term 'reform' is, in Leys view, used to denote that the *White Paper* entailed:

'maintaining intact all the elements of the colonial economic structures except for (a) the conversion of part of the former White Highlands from large-scale mixed farming to small-scale households plots for Africans (the so-called Settlement Schemes); (b) ending the restrictions formerly imposed on African farming in the former Reserves. (...) For the rest, there was a very important change in ownership of all assets: on the remainder of the mixed farms in the old 'white Highlands' (not included in the settlement schemes) which were sold by their white owners to Africans, and in trade, especially retail trade which was progressively transferred to Africans from the Asians who had controlled the bulk of it in the colonial period.'³⁸

Mohiddin (1981) too is clear about the aims of the *White Paper*:

'Far from preventing or eliminating class divisions, *African Socialism* promotes and encourages them in Kenya. It is (...) the individual and not the communal virtues of traditional society which are encouraged. Its vision of the future society is one of property owning individual entrepreneurs, businessmen or farmers. (...) a society which stresses and values individual consumption and accumulation.'³⁹

Moreover, Africanization of the economy during the first years after independence became increasingly identified with 'Kikuyunization' and was most certainly identified with ethnic rivalry.

Nevertheless, despite the large representation of the landed elite, politically voiced in parliament as well as in the various state apparatuses, sections of the state bureaucracy continued to support the small-farm sector. Heyer (1981) argued, however, that

'the policy changes to the benefit of small farm areas became not very evident until the late 1960s after the major reorganization of the large farm areas had been completed.'⁴⁰

The support for the small farm sector was undoubtedly facilitated by many bureaucrats who were impressed, as some of their European predecessors had been, by the high labour productivity on small holdings. There was a growing interest of state agronomists, economists, extension officers and other state officials to support the small farm sector (see chapter 4). There existed a certain space within the state apparatus for such initiatives despite it meaning the reduction of the influence of the large farm sector interests on agricultural policy development. The marketing of milk, since the 1940s dominated by large farmers, was the first example in Kenya after independence of the buying over by the state of political opposition to granting smallholders access to the fresh milk marketing system.⁴¹

The initiatives of the independent state in relation to the development of the small farm areas coincided with increased attention from international development agencies and foreign finance institutions to facilitate the development of small-scale agriculture in Third World countries. The World Bank, particularly since the mid-1970s⁴², and other donors became heavily involved in the implementation of rural development programmes, agricultural research and other infrastructural projects.

State-society relations other than 'the state activated from above' or 'activated from within' can also be held responsible for the state's smallholder expansion programme. The state also became 'activated from below' or as Heyer (1981) puts it, responsive to the demands of 'rural Africans'.⁴³ These groups and classes, generally not represented at the political level, exerted pressure on the state for greater shares of the resources that were becoming available. Health and education programmes expanded considerably in the rural areas. Although, self-help programmes appears to have forced the state's hand, even to the extent of pushing state expenditure into areas that it did not find optimal, because the political costs of denying money to ministries and policy areas heavily influenced by self-help was too great to bear.

Harambee projects, a particular form of self-help, may be seen as a form of popular pressure on the state to expand the provision of educational and health facilities, roads, water supplies and agricultural infrastructural services (cattle dips) to the small farm areas and former Reserves at a rate far greater than the state had intended. They also involve women groups that pursue a wide variety of income earning activities. As a result of local initiatives, rural development investment has accounted for up to perhaps 30 % of the massive construction of infrastructure in the immediate post-independence period and after.⁴⁴

Popular pressure was also partly accountable for the change of policy on the subdivision of large farms. The land reform envisaged in the Swynnerton Plan was extended despite the fact that opposition to land consolidation and registration was a strong element of the political platform in some areas even after independence. The 1965-66 Mission on Land Consolidation and Registration was not only appointed to investigate ways to accelerate consolidation and registration of land, but also to look into the need for credit and extension services, which were regarded as the two essential elements of Kenya's agrarian structure.⁴⁵ As a result, in the late 1960s agricultural credit, for instance, became available to the smallholder population more widely than before and was officially announced in the first *Development Plan 1966-70*.⁴⁶

8.2.2. A change in the nature of state power ?

The period between the 1950s and the early 1970s may be regarded as the period during which the basic features of Kenya's agrarian structure were laid down. The material base of indigenous capitalist classes, reinforced by occupying crucial political positions within the state apparatus, was reproduced and subsequently extended.

The political alliance of the ruling class and the state with the urban and rural petty-bourgeoisie and the peasantry, which nourished growth, political legitimacy and integration began to erode. The particular constellation of concentrated economic and political power evoked political opposition from the petty-bourgeoisie, particularly among its urban sections. Individuals of the petty-bourgeoisie came to the forefront of political opposition because the concentration of property inhibited their particular accumulation strategy. The concentration of property clearly placed limits on their straddling strategies.⁴⁷ The regime made some concessions during 1975 to extend the basis of straddling to its widest possible limits. The state proclaimed measures to facilitate the further entrance of small African businessmen into retail trade, in particular under a trade licensing programme⁴⁸; the repayment period for commercial loans from the parastatal Industrial and Commercial Development Corporation was extended from 3 to 5 years, and most important of all, local manufacturers (which include foreign companies registered as local companies with indigenous partnership and joint-ventures) would now be required to distribute their products through citizen-owned companies rather than do it themselves.⁴⁹ Despite these concessions, political and ethnic opposition remained.

The political intervention of the state, crowned by the banning of KPU, thus did not dispose of the antagonisms between the ruling classes and the intermediate strata.⁵⁰ KPU's 'populist' ideology, developed by KPU-leadership, continued to articulated in parliament and was further developed

by a small number of MPs who survived the elections held in 1969 and 1974. MP Kariuki, a former Mau Mau detainee, former Assistant-Minister in the Kenyatta cabinet until 1974 and business millionaire, was a prominent spokesman of populist ideology in parliament and in public. Kariuki appealed to social inequalities in general. Kariuki's famous words, by which he criticized state economic policy, are that the Kenyatta regime was building a country of '10 millionaires and 10 million poor people'.⁵¹

In the rural areas land, ownership was becoming more and more concentrated in a few hands, a fact which was, and still is, difficult to deny. Nowhere in Kenya was the combination of landed property and state power so substantial as in Central and Rift Valley Provinces; i.e., precisely the regions which produced the bulk of marketed volume of agricultural production (see Chapter 4). These were also the regions upon which the regime's political legitimacy was based. Thus, when Kariuki came to the forefront shouting his famous words, the ruling class knew exactly where this message would probably generate popular action: in Central and Rift Valley Province. Kariuki, like Mboya in 1969, was murdered in 1975 under circumstances that strongly indicated the complicity of people very high up in government and quite close to the president. He became a dangerous man to the Kenyatta regime not only because he was obstructing the dominant ideological order in society; Kariuki was probably attempting to mobilize a political alliance of the rural landless, poor and middle peasants and the urban unemployed and workers.⁵² The emergence of MP Kariuki, and the political crisis he provoked, was an expression of how tenuous this political alliance between the indigenous bourgeoisie and the peasantry was.⁵³ The ideological cement of the bourgeoisie-peasantry alliance became increasingly undermined by the concentration of land ownership and the widespread socio-economic inequalities within the agricultural sector. This uncovered one of the potential dangers and limitations anchored in Kenya's post-independence development strategy.

In the meantime, the external limitations placed upon Kenya's export-oriented agricultural strategy became increasingly overt. While the exercise of state power may have a role in the production of commodities locally by providing public investment in agricultural R & D, guaranteeing supply of inputs, providing services and capital, the international terms of exchange are beyond local state control. As indicated in Chapters 3 and 4, the international terms of trade shifted against Kenya during the late-1970s (and later in the early and in the late-1980s) and resulted in serious current payments account deficits.

State revenue and household income from export commodity production were falling rapidly. Cowen (1986) points out that the adverse international determinants of Kenya's development strategy contributed to the fact that the potential ideological basis for a political alliance between the state, the ruling classes and the peasantry began to fall apart.⁵⁴ Since the mid-1970s with the end of the coffee boom in 1977 and an inflation in energy costs (mainly oil), growth in GDP per capita has dropped from 5.1 % in 1976/1977 to 1.2 % in 1979-1980. With this, the growth of the internal market has stagnated, thereby creating additional problems for indigenous accumulation in commerce and industry and for the stability of the political system. In Chapters 4 and 7 it has already been pointed out that decommodification, as a reaction of household

producers to the adverse conditions for commodity production, was a noticeable phenomena in these years.

This is the period when Daniel arap Moi came to power. When Kenyatta died in 1978, Moi succeeded him to the presidency. Moi, as Cowen (1986) puts it, succeeded to power on the wave of opposition to the Kenyatta regime and its particular concentration of political and economic power. 'The Moi regime encapsulated the opposition as an expression of state power'.⁵⁵ If Moi was to establish, and at the same time legitimate, his leadership and rule over the country, he had to deal with the opposition to the previous regime. Moi's succession was facilitated because political and economic power had become concentrated and centralized within the state apparatus, notably in the OP. While during the Kenyatta regime political intervention in the economy guaranteed the economic base of the ruling classes and notably the Kikuyu, Moi resorts to political intervention to protect the position of classes and groups which were part of the nationalist alliance for independence but were kept far away from the exercise of power after the transfer of state power by the colonial state.⁵⁶

The consolidation of Moi's presidential powers was severely restricted by an attempted coup on 1 August, 1982, by sections of the Kenya Air Force. More importantly, perhaps, is that it was restricted by his struggle for political power with his former ally Njonjo. Njonjo became Moi's most important ally during 'Change the Constitution Movement' campaign. Njonjo, like many others, must have believed that Moi's power would become increasingly ceremonial and that real economic and political power would be placed in the hands of a prime-minister with executive powers. It is widely asserted that Moi lacks the charisma to be a powerful president. Although Moi created a very influential cabinet post, Minister for Constitutional Affairs, for Njonjo, in the end Njonjo lost the struggle for state power. The "Njonjo affair" has been spelled out in detail by Curry & Ray (1984). The main thrust of their argument is that the background to the ensuing Moi-Njonjo struggle is not only explained by ideological differences, 'but also by the confrontation between incipient domestic and transnational capital, the eventual outcome of which remains undecided'.⁵⁷ Njonjo represented in their picture that fraction of the indigenous ruling class with close links with foreign capital (i.e., the so-called compradore bourgeoisie); while Moi attempted to regain the confidence of intermediate strata without alienating himself from the ruling classes.⁵⁸

The *Weekly Review*, a fairly independent liberal political magazine, offered a different explanation. The Review emphasizes the fact that Njono and his machinery wielded so much political power that it threatened the political position of the president: 'Power once created can only be redistributed; it cannot be destroyed'. Thus the elimination of Njonjo and allies from strategic positions within the centralized state apparatus was a necessary component of Moi strategy to consolidate his position. In the view of the *Weekly Review*, there has emerged in Kenya,

'a new crop of politicians who are close to the president and may have inherited some of that power. But, by and large, most of the power Njonjo wielded has reverted to the president, to whom it rightfully belonged in the first place.'⁵⁹

Thus the dislocation of the local and international determinants of state power coincided with a change in the nature of state power. The Kenyatta period was the period when the 'big men' came to power and stayed in power. Moi increasingly moved against the 'big men' in order to remove them from the centre of state power, although, as cogently argued by Cowen (1986), the change did not signify the end of a state which was bound to the private accumulation of capital. The Moi regime continues to sanction and has sought to smooth the path of private accumulation.⁶⁰ Cowen asserts that the regime has sought to extend the basis of indigenous accumulation, from its previously privileged focal point in Central Province, to encompass accumulation in the West of Kenya. The expansion, in particular, of large-scale sugar production in Western (Nandi and Kisumu district) Kenya is a relevant development pattern in this respect. A second aspect is that the Moi government, in its foreign policy, put much effort into re-establishing the regional East African market for Kenyan based manufacturing firms and to open up other export markets for Kenyan manufactured goods. This move may be regarded as an attempt to overcome the restrictions placed upon accumulation in industry by the limited size and purchasing power of the national market.⁶¹ Threatening state enterprises with denationalization and effectuating the threats is another aspect of Moi's economic policy. The question now is to whom these state-owned companies will be sold; who is 'the public'? Curry & Ray (1984) suggest that the sale of parastatals, without safeguards and limits on individual holdings, would benefit most that section of the ruling classes which maintains strong links with finance capital.⁶²

Cowen's argument is that the *ideological weight* of the Moi regime is directed against both the grander of indigenous capitalists and the 'grandeens' who emerged during the Kenyatta period of government.⁶³ Thus what Moi attempts is not to attack the material basis of indigenous capitalism, but politically to remove indigenous capitalists from direct intervention in the economy. This does not imply that they are not capable of maintaining political ties to the apex of state power to defend their interests: the ties continue to exist but now mainly mediated through politics of representation. The indigenous capitalists remain a privileged class by virtue of its history of accumulation but no longer controls state power as a representative sector of the ruling classes.⁶⁴ This would suggest that the position of the state bureaucracy and institutions vis-à-vis the ruling classes is increasingly strengthened during this political process of transformation.

Moi's moves against the 'big men' can be illustrated by several public statements and the style of leadership he is developing. One of his earliest pronouncements was, for instance, that 'one can accumulate enough wealth to buy a golden bed, but one cannot buy sound sleep with money'.⁶⁵

In this way, Moi was posing as a 'populist' leader and adopting a populist leadership style which would foster the interests of the small man.⁶⁶ The *Weekly Review* wrote shortly after the attempted coup against Moi on August 1 in 1982

'At Both Kisumu and Kakamega, the president continued his now familiar approach at public meetings. (...) he warned the public against 'big people' who were usually behind all the problems of the country and whose activities hurt the small man. At Kisumu on Monday, he hit

again at the big people, and Nyanza leaders responded by extrapolating into the president's remark the probability that some "big man" was behind the August 1 coup attempt⁶⁷

President Moi's public statements constantly proclaim the pre-eminence of private property as the criterion on which individual wealth rests. The various development plans and Sessional Papers expressed these views constantly. Moi's statements were made to attack politically the 'big men'

'Regrettably some persons in authority, others in responsible positions and even those in middle and lower positions have, out of greed and selfishness, exploited the general public through misappropriations, corrupt practices, blackmail and bribery. Such people are blatantly undermining our objectives. The government has therefore an obligation to ensure that there are equal opportunities to all citizens and to eliminate such anti-social behaviour'⁶⁸

Moi stressed, furthermore, that 'every member of our society is important and equal' and that 'every Kenyan is entitled to an equitable share of resources' and that 'our society must therefore be free of exploitation'. The context of these statements is again the aftermath of the attempted coup in 1982, the so-called "Njonjo Affair" and the appointment of a working party (the *Working Party on Government Expenditures*, i.e. the Ndegwa Commission) to frame a national code of conduct, which would revise or abandon the formal approval of straddling by the state. The fourth Development Plan issued in 1979 had already promised to introduce a code of leadership and to re-examine 'safe guards intended to ensure the paramountcy of the public interests in the civil service'⁶⁹

Kenyatta also pronounced, as indicated earlier, the same objectives, but his public statements had a different content, namely, primarily acquisition of private property for the 'Gatundu Courtiers' through straddling (which was approved with state consent in 1971) and simultaneously cementing the alliance with the peasantry. His famous rhetorical question asked during the KANU-KPU struggle to the vice-chairman of KPU, Kaggia, in 1966, 'What have you done for yourself' is a clear expression of Kenyatta's ideas about property right and acquisition of property.⁷⁰

Moi's attempts to abandon, or at least to limit, straddling can be interpreted as strengthening the productivity of the state apparatus in order to increase the efficiency of state intervention in agriculture⁷¹ and/or as an attempt to limit straddling by the 'big men' to give room to 'small men's' interests whose acquisition of property is restricted because property became concentrated in earlier phases of straddling (particularly immediately after independence).⁷² It is the particular concentration of property in a period when the opportunities to expand property acquisition are severely limited which makes the concentration of property unacceptable. During the Kenyatta regime the illusion of property rights was the basis of stability, but when property right to land become endangered (or appear hollow because of deteriorating conditions of production and exchange) and its distribution highly unequal, the illusion of property rights is easily shattered. More importantly, its shattering creates opportunities for political instability and social disorder, a situation in which political opposition may gain ground. Into this context we

must place, for instance, Moi's directive, soon after he became president, to suspend all allocations of plots in the country. The decision had been prompted, according to the President, by the fact that there were too many people with too much land and who were still trying to get more when many Kenyans had none.⁷³ A few years later, the press launched in May-June 1982 a campaign against the practices of corrupt 'land buying companies'. The campaign reached sufficient pitch for Moi to intervene directly and order an end to their dealing in some areas.⁷⁴ Moi on a later occasion, in 1986, intervened again in the land issue. This time it involved the practice of a state institution, the AFC. Moi banned the auctioning of land belonging to farmers who could not repay loans advanced under by AFC. Moi attributed the farmers' inability to repay the loans to the devastating 1984 drought.⁷⁵

This kind of public denouncing by Moi of companies' land purchases asserts the sensitivity of land issues in Kenya. The post-colonial state after all derives its legitimacy partly (but still largely) from the property right to land. Kenya's history bulges with examples of land conflicts. Mau Mau was basically a land conflict and the KPU-KANU conflicts were to a major extent focused on the land question. Also recent unrest in some regions (such as in Kapkangani sub-location in Nandi district in 1981-1982; see Chapter 6) involved fights over land in the countryside.

Moi's political intervention in the distribution network of agricultural inputs in 1985 in favour of the KGGCU at the expense of the KFA may be seen in the context of his attempt to assert the state's commitment towards the small farm sector, and it was clearly part of Moi's strategy to propose himself as defender of 'small men's' interests. The KFA was generally viewed as an organization established as to serve the interests of the estate producers and the large farm areas. The links between KFA and the smallholder population were regarded as neither efficient nor serviceable.

One obvious reason for Moi to exclude the 'big men' from the apex of state power may be that the concentration of property and political power under their command is a viable threat to the reproduction of the so-called 'non-capitalist classes' and thus endangers political and economic stability in the country. Despite the economic and political weight of members of the ruling class in the politico-economic structures of the country, agricultural land policies have also been guided by a desire to prevent a further concentration of land and other means of production in the hands of the landed and other members of the ruling classes, although, a further redistribution of land or large-scale land reforms are still not on the political agenda of the state.

The Moi regime and Moi's leadership differ also in other aspects from the Kenyatta regime. While under Kenyatta, members of the Kikuyu as an ethnic group were promoted to the higher ranks in the state apparatus, during Moi's rule members of the Kalenjin tribe gained access to these state positions. Moi created thereby enhanced opportunities for Kalenjin to straddle private accumulation with political positions. A further significant difference is that during Kenyatta's time capital was invested productively in agriculture, manufacturing and industry. It appears that, under present conditions for accumulation of capital in the agricultural sector has deteriorated and capital increasingly being siphoned off to the circulation sphere of the economy.

A second difference is that, under Kenyatta, the ruling party KANU had been allowed to decline as a political organization, Moi, on the contrary,

revived the role of the party and strengthened its position and organizing capacity. It may be argued that Moi's exercise of power was supported by a revival of KANU as a political organization and that he used it as a political machine to consolidate his power and legitimacy.⁷⁶ Moi launched a KANU membership recruitment drive to rebuild the party. The response to the appeal was modest, however. When the campaign was closed in April 1983, only 22.1 % of all Kenyans over the age of 18 had registered as members.⁷⁷ Later in 1985, the president ordered that all civil servants must also be party member. Candidates for public office must also be member of KANU. In the course of this KANU-strengthening process, Moi frequently proclaimed the supremacy of the party over Parliament. The functioning of the Parliament became subordinated to KANU. This means, as the Weekly Review emphasized, 'the assurance that the government has the power to pass any legislative agenda it chooses through parliament.'⁷⁸ The designation of the KANU party as the only machinery for wielding political power positions implies that the personal political power of the 'big men' also became increasingly founded upon district politics.

The position of KANU was even more strengthened a few months earlier, in June 1982, by declaring it as the only political party in the country. Kenya became *de jure* a one-party state having been a *de facto* one-party state since 1969. A direct motive for this kind of intervention of the state in the political sphere was that Odinga, who was pardoned by Moi and admitted to KANU again, started to ventilate his oppositional views against Moi's policy. He was expelled from KANU after that. To prevent the formation of an opposition party in which Odinga was involved and which would undoubtedly express socialist ideas, Kenya was declared a *de facto* one party state.⁷⁹ Furthermore a determined effort was made to crack down on left-wing dissidents and 'foreign ideologies' especially at the University of Nairobi.⁸⁰ At the height of this campaign in which the press played a very dubious role⁸¹, six university lecturers were arrested and detained in 1982. The banning of intellectuals after detention, the banning of the Civil Servants Union (in 1980) and the University Staff Union (in 1982) and several temporary arrests and detentions of politicians are all attempts by the Moi regime to silence discontent.⁸² In December 1984, Moi announced that a civil servants' association could be formed but under state supervision.⁸³

Moi's adoption of a populist leadership style also translates itself in his political moves towards the masses of the people. Holmquist (1984), for instance, suggests that Moi's rather insecure position during the first years of his presidency is a likely explanation for Moi's deep involvement in self-help (harambee). Moi realized, to the same extent as Kenyatta did during his time, that access to the peasantry is best provided by involvement in self-help or harambee fund raising. Moi became increasingly committed to massive fund-raising meetings with wealthy guests of honour who gave large amounts of money from themselves and 'friends'. Another aspect of Moi's political strategy is his personal involvement with the 'informal sector' (or the so-called *jua kali* activities) of the economy. He frequently urges state institutions (in this case the Kenya Industrial Estates) to pay more attention to the development of that sector because its expansion would help to solve the employment problem in the country.

The control over the political sphere exercised by the ruling party through the state is thus considerably strengthened under Moi's rule and appears to be a very powerful instrument in the support of his political position. Anti-KANU is similar to anti-Nyayo which means anti-Moi.⁸⁶ Being expelled from KANU, or the threat of expulsion, is enough to silence discontent. Or as Atieno Odhiambo (1988) put it:

'Expulsion from KANU means being politically unpersoned and therefore a social outcast. (...) Expulsion is a weapon that is available to district political bosses for whipping their rivals, as has been evident in the repeated threats of its usage (...) in the last four years.'⁸⁷

The above makes it clear that intervention in the political sphere by the state in the Nyayo-era is used to silence the opposition from the left, while simultaneously relegating the 'big men' to the margins of state power at best, and to the margins of representative and factional politics.⁸⁸ The KANU is the essential political machinery for this elimination process. In the last two aspects, Moi's regime differs significantly from Kenyatta's regime. The magnitude of intervention in political affairs, however, is characteristic for both presidencies.

It seems that Moi intervenes with much more vigour and intensity than Kenyatta did. Moi's recent interventions are increasingly directed against any form of opposition to him and KANU, whether it is left or right, popular or bourgeois opposition. Recent political events in Kenya confirm this. Moi persistently maintains the one-party system in the country as the only outlet for formal political organization and representation.

Moi has clearly adopted a strategy since his ascendancy to the presidency in 1979 to legitimate his political leadership and position as father of the nation. His strategy is based on a restabilization of the state by restoring its role as mediator amongst the propertied classes. He avoided being associated in these attempts with a particular sector of the ruling classes.⁸⁹ Gaining popular support from the *wananchi* (citizens) and an identification with their interests by distancing himself from the 'big men' in both the civil service and the government can be seen as expressions of Moi's drive. The fierceness with which various sectors of society (including Moi's former allies in the government and KANU) today oppose his regime reflects the bankruptcy of his personal political strategy and leadership.⁹⁰ That Moi's political strategy and leadership style may appear to be a failure, does not invalidate the argument presented in this chapter, that the nature of state power has changed fundamentally.

8.3. Commoditization, institutionalization and state intervention in retrospect

The main agencies responsible for policy implementation in Kenya are various state institutions. Kenya's history revealed that the state was frequently, but not always, autonomous in its functioning vis-à-vis the ruling classes. The extension of the land reform despite political opposition from the ruling class, the provision of service and capital to small-scale agriculture and the buying over of large dairy-farming interests are among the examples which point at the relative autonomy.

The best examples, though, remain the tea, coffee and horticulture commodity production schemes which incorporate a large number of efficient small-scale farmers. The agencies of the state - the KTDA, the Coffee Board and the numerous marketing cooperatives - facilitating integration were singled out by the state itself (Ndegwa Report, 1982) and foreign agencies (World Bank, 1984) as the most promising and efficient institutions among a wide range of other state institutions. In addition, credit and extension schemes administered by these institutions were adjudged successful (see Chapter 7). Although the 'export crop' bias was primarily successful in terms of servicing and marketing, it seems that their responsibility stops exactly at this point. The determination of export producer prices vis-à-vis input factors and consumer goods, which deteriorated dramatically, appears to be an exercise beyond their control.

The concentration in state institutions of the infrastructural framework for enhancing commodity production in export agriculture nourished state control over the actual conditions of peasant production. Through these schemes, particularly during the good years, the political dependence of the producers on the state may have been reinforced and the political integration of the peasantry increasingly secured. In a later phase, however, the legitimacy of the state was shattered and the option of enhancing political integration increasingly diminished. This had much to do with the deteriorating international terms of exchange and with the peasantry's position as producers and consumers vis-à-vis other sectors.

The actions of institutions responsible for (i) the marketing and pricing of domestic agricultural commodities, (notably maize and milk) and (ii) the terms of trade for agriculture vis-à-vis industry and commerce, raised many questions. The pricing and marketing regulations of the state institutions involved (notably OP and Treasury) are used to advance objectives which are often not directly related to economic mechanisms such as domestic market supply and domestic demand. The examples of inefficient maize marketing, domestic agricultural terms of trade as well as maize versus milk producer prices made this extremely clear.

Maize marketing (and regulation of consumer and producer prices) has always been a crucial element in colonial and post-colonial state policy and politics. The option to lessen state involvement has always existed: there have been nine government-installed commissions inquiring about maize marketing since 1942 recommending, without exception, less state control. Let the market determine offer and demand and price was the motto. The role of the state was to be limited to buyer and seller of last resort. The implementation has, however, always been constrained by the fact that maize marketing arrangements during the colonial and post-colonial period, have been heavily influenced by the estate producers. They have always commanded substantial political support for their interests as producers and traders. During the colonial period, the maize market and pricing system favoured the white settler producers; after independence, the system, as is shown by Leys (1975) remained in tact. Moreover, as Cowen (1986) notes,

'under Kenyatta individuals at the apex of state power were directly involved in ownership and management of maize production on the

basis of large scale enterprise. Maize, indeed, was the most privileged of commodities.⁹¹

As traders, the estate producers made profits out of the persistence of controls. Mosley (1986a):

'their possession of trading licences, for which there is substantial excess demand, enables to them to make large profits by shipping maize from surplus to deficit areas in times of shortage; these profits are oligopoly rents which might flow elsewhere if maize were decontrolled.'⁹²

It was not only because they maintained close personal relations with the exercising of state power that the new owners of the White Highlands managed to gain state support. Leys (1975), Mosley (1983, 1986a, 1986b) and Bates (1981, 1983), for instance, frame the success of gaining state support to the effect of pressure groups, such as the Kenya National Farmers Union (KNFU) and the Kenya Farmers Union (KFA). These organizations were the spokesmen of (large) farm interests lobbying for state support and the creation of an economically favourable environment for agricultural producers. The leaders of these organizations were primarily large-scale farmers themselves. To make the circle of political representation round, these leaders had close connections with those occupying powerful positions within the state apparatus or were within the centre of state power themselves.⁹³

There appeared to exist, however, a difference in political influence between maize producers and dairy farmers. Leys (1975) states in line with Cowen (1986), that the politics of representation worked out rather differently for milk and maize producer prices, as is shown by Figure 7.6 in Chapter 7. The existing producer price differentials between milk and maize, as well as between milk production versus maize consumption prices, may be explained as follows. Despite the fact that maize and milk are both important wage goods in the urban worker's budget, milk producer prices have been kept low because an increase might provoke demands for higher wages. Maize producer prices, contrary to milk prices, were frequently raised. Maize consumer prices have been kept low because of state subsidies (see Chapter 7, sections 7.2.2.1 and 7.2.2.3). The difference between these two commodities is that contrary to maize, milk has primarily been produced by small-scale dairy farmers since independence. Milk prices were seemingly easier to control than maize prices. This happened despite that due to the relative pricing system necessitated imports financed by the state.

The milk producer price rises after 1981 (although still less than the increase in maize producer prices) and the implementation of the Dairy Development Programme (DDP) suggest that the state is determined to continue to implement its pro-small farm strategy in the dairy sector, to increase the marketed volume and reduce the need for imports. That this has been a successful operation is displayed in Figure 6.5 of Chapter 7, although it is unknown who exactly realized the increasing supply of milk for the market. The milk and other producer price increases raises, however, two questions. The first is who induced these price rises? The government itself or IMF and World Bank officials who sit in the Ministry of Finance demanding the elimination of subsidies and higher producer prices?⁹⁴ The restructuring of the maize market in favour of private traders was, after all, triggered off by

World Bank intervention and not by actions of the state. Despite this external intervention, the Nandi survey indicated, however, that the characteristics of the maize marketing structure, late payments and difficulties of small-scale farmers in selling maize to the NCPB, continued to exist.

The second question concerns the appropriateness of the milk producer price fixation in relation to maize consumer prices. As is shown in Figure 7.6, milk producer prices are still not related to the subsistence component of small scale dairy farmers, which generated tendencies with the opposite effect: a reduced supply of milk instead of an increased supply. The knowledge which informs price policy makers is obviously not based on a thorough awareness of strategies of small scale dairy farmers.

Maize indeed is a privileged commodity in Kenya. Social forces that spawn the maize sector occupy crucial positions, either politically and/or economically. This is an undeniable fact. The reactions of Kenya's estate producers, who produce 70 % of the marketed volume of maize, to the deteriorating conditions for estate production are proof of such a statement. In addition, the estate producers and the larger farmers were advantaged in their transport facilities to NCPB depots and gained privileged access to credit and extension services rendered by the state. Agricultural R&D efforts were mainly concentrated on their demand for land and labour saving technologies.

The fact that maize is a staple food, and, above all, widely consumed by households producing export commodities only makes maize a more important asset in Kenya's political economy. That the state reinstated the previously abolished GMR credit scheme, which has been primarily oriented towards the estate producers since the colonial period, is indicative of their relatively strong economic position. This happened despite the fact that there have been attempts by the Moi regime to reduce the big men's political influence. This suggests that the state is forced to continue to carry the load of indigenous accumulation in the estate sector by controlling prices and privileged access to marketing facilities, credit and extension services.

The same may be argued if we consider the deterioration of the position of the agricultural sector as a whole vis-à-vis other economic sectors and branches. This raises questions about the ability of the state to assist the agricultural sector in performing its threefold task in the economy. The relative pricing instruments of the state had the effect of worsening the position of farmers on various fronts. The responses to this situation have been examined in Chapter 7. Both the efficiency and the effectiveness of these policy instruments are thus ambiguous. The price reviews undertaken by the OP and Treasury apparently favour interests in manufacturing and commerce sectors of the economy above those in agriculture. Increases in retail and manufacturing prices have been asked for by the local manufacturers and distributors as well as recommended by World Bank officials. While seed producer prices and retail prices of fertilizers, seed and implements have been raised in order to cover increasing manufacturing and distribution costs, prices paid to producers have been increased, but the domestic agricultural terms of trade vis-à-vis other sectors of the economy have never exceeded parity.

Besides that, state intervention in the importation of fertilizers through an import licensing system is frequently disorganized and inefficient. The effect was that fertilizers were not widely available and yields went down considerably. This is partly explained by a lack of donor coordination. (Donors

supply 50 % of Kenya's fertilizer needs). Fertilizers arrived either too late, i.e., after the planting period, or were sold by the government to the farmers at different prices.⁹⁵ The inefficiency can be partly attributed to corruption and patronage. The World Bank noted, for instance, that some firms who entered the fertilizer distribution market had no capacity to import and distribute the fertilizers.⁹⁶ In addition, the major distributor, KGGCU, had been approached several times by importers willing to sell their licences for a profit.⁹⁷

The above suggests that commoditization and institutionalization in agriculture, triggered off by state intervention, is moulded primarily by the interests of estate producers, 'progressive farmers' and the manufacturing and commerce sector of the economy. Despite this, Kenya is a perfect example of a country experiencing a steady increase of agricultural commodity production by two social forms of production, identified in this book as the household, and estate and capitalist producers.

Household production clearly survived as a unit of production alongside capitalist commodity production. This is the major element of Cowen's (1974, 1981a, 1981b, 1986) contribution to the discussion 'what is happening to the Kenyan peasantry'.⁹⁸ The perspective that the development of capitalism in the countryside in Kenya did not proceed through the capitalist differentiation of the peasantry is confirmed by many research results including the Nandi survey.

This view contradicts the classic Marxist-Leninist view that the peasantry is vanishing and that polarization of the agricultural population between a capitalist class and a class of near-landless and/or landless labourers is the most likely result of commoditization. The emergence of a landed ruling class, taking over the White Highlands and wielding political power on the basis of its position in the highly centralized state apparatus, was to the detriment of the peasantry. This view is strongly defended by Njonjo (1981) and Swainson (1980).

The survival of the middle peasantry has been attributed largely to state intervention in agriculture. The analysis inferred, however, that institutional relations are severely biased. The provision of credit and extension services and the orientation of agricultural R&D are seriously flawed by being merely focused on the needs and resources of the large farmers and the richer sections of the smallholder population (the so-called 'progressive' farmers). The web of relations between the state institutions in Kenya's agrarian structure and the farming population in Kenya shows a considerable variation. These relations are not always equally intense with all sectors of the farming population and, accordingly, the benefits from the set of relations are not equally shared.

The bias towards large farmers and the 'progressive' farmer can be explained by the combined operation of political and economic factors: politically, by the fact that they can command political power to demand services and privileged access to state funds; economically, by the fact that policy, as well as policy makers and those who implement policy in the field, use economic rationales (growth rather than equity) and have consequently targeted specific sectors of the agricultural population: the large farmer and 'progressive' farmer appear as logical partners in the development process. The classification schemes used by policy makers (see Chapter 3) hides this orientation and thereby legitimates, for themselves as well as for the privileged farmer, the distribution of benefits to these groups. This approach is partly

deliberate because of direct economic pay-offs and that it is politically productive for the state; it is partly unplanned because specific interest groups put pressure on the state on the nature of intervention, and on how and when to intervene. The implicit classification schemes have, therefore, a clear ideological foundation and focus.

This approach to state intervention in agriculture generated three general development patterns with the reproduction of differentiation as the logical outcome of the combined operating processes of commoditization and institutionalization.

In the first place, a development pattern emerged based on accumulation and enrichment. The benefits of state policy accrued to a relatively large proportion of the smallholder community and has contributed to accumulation of wealth and/or capital by capitalist farmer and rich peasant households. It was also indicated in Chapters 4 and 6, that this development perspective was also founded upon straddling between the agricultural sector and other sectors of the economy

In the second place, the development perspective founded upon a middle peasantry whose production and reproduction is mainly based on agriculture and on maintenance of commodity relations. This group of farmers, in particular, appeared in this process as resilient despite processes of commoditization and institutionalization and state intervention tending to favour capitalist and large-scale production.

In the third place, the implementation of such intervention programmes resulted also in programmes, however, which are harmful for the poorer sections of the agricultural population, or, as policy makers tend to label them: non-progressive farmers, poor smallholders and pastoralists. They have only partly and indirectly benefitted from state intervention. Moreover, as also pointed out in Chapter 4, only a few regions were favoured by state policy. It may be argued that the state did little or nothing to alter the patterns of regional and social differentiation which had been operating in African smallholder agriculture before the beginning of the 'agrarian revolution' in the 1950s. The poor peasantry and the landless, however, may not be able, at least in part, to cope with the concrete conditions for involvement in commodity production.

The negative outcome of commoditization, institutionalization and state intervention is clearly reflected in an increase of landlessness, labour outward migration to low-paid urban jobs and migration to less fertile arid and semi-arid lands, widespread poverty and low nutritional status effecting large sections of the rural population and, to a certain extent, decommoditization. An inability to cope with the concrete conditions for commodity production has forced rural households to seek alternative strategies; i.e., to diversify labour power off the holding into low-paid off-farm employment to take the subsistence strain off the holding and perhaps raise the household subsistence level a little. By 1952, the smallest and poorest households had already adopted this strategy of reliance on off-farm income. The task of the 'agrarian revolution' was to lay down an agrarian structure which, as Kitching (1980) posed it, if it was genuinely to assist the poorest, was to get that labour power back onto the farm; it did not succeed in this respect - quite the contrary. The same can be said about the households looking for opportunities for off-farm income which they have not yet found.

Taking the three development patterns together, we can summarize developments in agriculture in Kenya as follows: the technological, administrative and political foundation of Kenya's agrarian structure, largely created by the state and concentrated in various state institutions, has introduced new opportunities and technologies with possibilities of increased productivity and prospects for growth and accumulation, but simultaneously materialized relations in the agrarian structure which increasingly restrict the maximum utilization of these offered opportunities. Not only the first pattern, but also the second pattern should be of concern to the state and also to foreign aid institutions.

The current development plans underline the need for alternative strategies. Politically, as argued in this chapter, there exists at present more room than ever before to develop such strategies. Whether this is borne out of restoring the legitimacy of the Moi regime and the state apparatus, and economic necessity or out of real commitment towards developing real alternatives remains to be seen. But the implementation of these objectives boils down to a matter of political and the state apparatus's administrative commitment, and particularly whether the state is able to coax consent among the dominant interests group in the power bloc which has dominated policy development in the past.

Prices may have changed a little in favour of the agricultural producers as a whole, marketing and input distribution improved and the nature of state power changed, but the technological core of state intervention remains invariably oriented towards the introduction of standardized commodity packages of modern, western technology. There have been no attempts by policy makers to go beyond small and large farm typologies, nor attempts to differentiate the technological recommendations and commodity packages. Conventional wisdoms die hard with the effect of leaving a potential source of development untapped. The exception to this general rule may be the National Dairy Development Programme. DDP is oriented towards the development of a differentiated technology package and based on different linkages established with the target group outside the 'normal' set of institutional relations, although it appears that the real effect of DDP will be limited due to the effect of pricing policies implemented by other, apparently more influential, institutions.

Notes

1 Leys (1979a), p. 308. Leys calculated that the state's direct share in the sphere of accumulation in the economy as a whole was confined to the operations of the parastatals; their share of the enterprise sector was 9.7 % of GDP in 1976. Now, 10 to 15 years later, since the state increased its activities in the economy through majority and minority share holdings, its share will be much larger.

2 See Kitching (1980), chapter XIII for the thesis that the state acts as merchant capital.

3 See Cox (1984) and Mosley (1986a). Mosley (p. 110) stresses that the particular issue of decontrolling the food (i.e. maize) market is always constrained by the idea that it would increase the economic stake of the large Asian merchant population in the country.

4 Leys (1978), p. 261 and Leys (1979b), p. 320.

5 Atieno Odhiambo (1988), pp. 116, 117.

6 See Leys, 1975, p. 212, ff.; Anyang' Nyong'o (1989), pp. 233, ff and Miller (1984), chapter I.

7 Anyang' Nyong'o (1989), p. 235.

8 See Lamb (1977), p. 48 and Atieno Odhiambo (1988), pp. 117 ff.

9 Atheno Odhiambo (1988), p 116 The term 'historical bloc' originates from Gramsci's theoretical work.

10 Leys (1979b), p, 302, see also Leys (1978), Cowen (1986) and Langdon (1981) Leys revised his position worked out in his book published in 1975 Soon after that, he ventilated his doubts about his assessment of the nature of those in power Whereas he earlier stipulated the compradore and petty bourgeois nature of the indigenous, auxiliary bourgeoisie tightly linked to foreign capitalist interests, in his recent work he stresses that the bourgeoisie in power is not confined merely to trade and agriculture but is increasingly moving towards the industrial sector Based on the 'painstaking' research of Cowen and Swainson, Leys changed his views considerably See Godfrey (1982), Kitching (1985) and Kennedy (1988) for an overview and synthesis of the famous *Kenya Debate*

11 Leys (1978), p 250

12 Atheno Odhiambo (1988), p 128 and Anyang' Nyong'o (1989), p 246 and Cowen (1986), p 364 The commission and its report is named after its chairman Ndegwa

13 Anyang' Nyong'o (1989), p 243 These accusations are made by the then American Ambassador in Kenya, Attwood who was a close ally of Mboya The essential reason for Mboya's killing may be that he became the second man in the party hierarchy after a major reorganization of the KANU party structure, and, therefore, in a position to succeed to the presidency after Kenyatta The Kikuyu elite feared Mboya, who was a Luo, for his organizational capabilities Knowing how to summon the otherwise moribund party into action when he needed it, he would not hesitate to do so effectively in settling the succession issue in his favour should Kenyatta die The hegemony of the Kikuyu bourgeoisie was at stake

14 Atheno Odhiambo (1988), p 129 and Anyang' Nyong'o (1989), p 238

15 Atheno Odhiambo (1988), pp 130, 131

16 Anyang' Nyong'o (1989), p 248 labels this as the weakness of the bourgeoisie It 'did not manage to organize a national political party in which it was effectively hegemonic, crises met the bourgeoisie with only one organized force in society that it could use the state.'

17 See also Leys (1979b), p 303

18 Swainson (1980), p 200, ff and Curry & Ray (1987), p 91

19 See Swainson (1980), chapter 5 and 6 for a detailed analysis of the mechanisms of control exerted over foreign investment in Kenya since independence See also Cowen (1986) p 356 and Leys (1978), p 254

20 Holmquist (1984), p 5

21 See Cowen (1986), p 361, Anyang' Nyong'o (1989), pp 231 233, Swainson (1980), p 183, ff, van Zwanenberg (1974), p 181 and *the Weekly Review*, 9 December (1988) Anyang' Nyong'o (1989) asserts that the particular association of state power with the presidency evoked increasing concern among the Kikuyu elite about the succession Kenyatta was after all an old man The then Vice-President, Daniel arap Moi was a Kalenjin and had a KADU background His ascendancy to the presidency could not be risked Appeals were made to nationalist KANU leaders to change the constitution which confirmed the automatic succession of the president by the vice-president The 'Change the Constitution Movement' needed a majority in parliament to change the constitution They did not succeed despite intimidation and bribery One explanation for their defeat in parliament was that there were MPs who did not owe their political rise to the old nationalist coalitions These were men who had risen within the political process of elections under the KANU-umbrella, but who did not owe any allegiance to the party either in terms of party discipline or concrete party support Thus once again showed the hollowness of the ruling party (Anyang' Nyong'o, p 248, ff) Another explanation for the failure of the 'Change the Constitution Movement' was that Moi at that time had a very important ally, Njonjo, who was Attorney-General in the Kenyatta cabinet and influential member of the Kikuyu bourgeoisie Njonjo's intervention was in favour of Moi, see Curry & Ray (1984), p 568 Miller (1984), chapter 2, provides a good account of the internal rivalry and clashes of the Kikuyu elite

22 See Lamb (1977a), p 50

23 Ibid p 50 and Njonjo, A, *The Africanization of the White Highlands*, Ph D Thesis, Princeton University Press, 1977, quoted in Cowen (1981b, 1986)

24 Njonjo (1977) quoted in Cowen (1986), p 365

25 Harambee means 'let us pull together' and is derived from collective labour It was the major slogan of Kenyatta rule Harambee is also inscribed in the coat of arms of Kenya

- 26 Self-help projects involve the provision of social services (nursery, primary and secondary schools) but also health centres, water supplies, local roads, cattle dips as well as women's groups that pursue a wide variety of income earning activities. Self-help is primarily concerned with construction and the supply of free labour. While the people bear about 90 % of these initial costs (together with state, non-state organizations, outside private contributors and also foreign donors), the state must bear most of the high recurrent costs. See Holmquist (1984), p 2
- 27 Anyone can be labelled as friends in this respect. Harambee money is frequently raised by 'friends' of an MP who would render the money to the community as a contribution from him and his 'friends'. It is often voiced in public that various donations made by 'friends' are from state resources
- 28 See, for instance, Barkan & Holmquist (1986) and Thomas (1989) who have documented this aspect quite clearly. It had significant appeal to rural petty bourgeois leadership. See also Bevan et al (1989) chapter 6. Their research revealed that the windfall gains of the export boom in the mid 1970s were a o spent by the richer strata in greater contributions to harambee projects.
- 29 Holmquist (1984), pp 10, 11 stresses not only the political space of the local community but also the difficult position of the community development assistants in the process of self-help. They find themselves having to respond to multiple pressure from the technical ministries to foster technically viable and financially sound projects, and from local politicians and MPs to pay particular attention to 'their' projects rather than those identified with rivals, and to avoid criticisms of projects that may be construed as criticism of the politicians. They also must maintain good relations with local chiefs who are also usually partisans of politicians, communities and clan or religious groups. The point is that, like politicians, local civil servants (chiefs, assistant-chiefs and community development assistants) must be responsive to self-help initiatives if they wish to keep their jobs
- 30 The contradictory nature of self help is also reflected in inter- and intra-state relations. State officials occasionally use self-help in their annual bargaining with Treasury, for more investment funds. And the local, participatory element of self help is frequently used by the state as an effective appeal for foreign aid in self help policy arenas. Holmquist (1984), pp 2, 3, 14-17
- 31 Development Plan 1966-1970, chapter 6, p 1
- 32 Heyer (1981), p 107
- 33 See Large Farm sector Study, volume 2, Main report (1977)
- 34 See Smith (1976), p 143 and also Leys (1975), Heyer (1976, 1981)
- 35 Swanson (1980), p 173-208. See also Leys (1978), p 256 and Leys (1979b)
- 36 Leys (1978), p 250
- 37 For details, see Swanson (1980), pp 187-201 and Mohuddin (1981), pp 114-118
- 38 Leys (1979b), p 298
- 39 Mohuddin (1981), p 79
- 40 Heyer (1981), p 110
- 41 Ibid , p 110, see also Cowen (1986) and Leys (1975), p 110 ff
- 42 Before the 1970s it may be argued that the World Bank supported large-scale agriculture and 'progressive' farmers. See a o Feder (1977) for an account of the underlying reasons of the shift in the Bank's policy orientation
- 43 Heyer (1981), p 110. De Janvry & Dethier (1985), section 2, make the distinction between the state activated from within, below or above to denote that the state is relatively autonomous from society but activated by various sectors, including the state bureaucracy itself
- 44 Mbitu & Rasmussen (1977), *Self reliance in Kenya The Case of Harambee*, Uppsala, Scandinavian Institute of African Studies, p 13, quoted in Holmquist (1984), p 2
- 45 Heyer (1981), p 112
- 46 See Development Plan 1966-1970, p 6 ff
- 47 Cowen (1986), p 358
- 48 Leys (1979b) stresses that the 1975 concessions to 'small capital' and the more advanced elements of the urban petty-bourgeoisie were rather different from the earlier state intervention in retail trade. The state required that, in future, Asians transferring their trading business to Africans under the trade licensing programme should actually leave the business. 'Thus implied that the opportunities should go more to small African businessmen and less to

big capitalists who would be happy to retain the former as 'partners' in the business, in effect simply receiving a stake in the equity" See Leys (1979b), p. 304

49 See Leys (1979b), p. 304

50 Ibid, p. 304

51 Cited in Atieno Odhiambo (1988), p. 131

52 See Leys (1979b), p. 304, Atieno Odhiambo (1988), pp. 131 ff and Anyang' Nyong'o (1989), pp. 247, ff. The latter is convinced, however, that Karuki was aiming for the presidency. What he needed was a political alliance to reach that goal.

53 Cowen (1981b), p. 61

54 Cowen (1986), p. 365

55 Ibid 358

56 Ibid 362

57 Curry & Ray (1984), p. 573

58 Moi is, in the eyes of Curry & Ray (1984), p. 587, attempting to control the compradore faction of Kenya's ruling classes and to readjust the distribution of the surplus in favour of local capitalists and the rural petty bourgeoisie. The allegations against Njonjo make this clear. He was alleged to have been involved in illegal currency dealings (thus depriving the state of exchange reserves, local capital of investment funds and rural producers of income), abuse of state power for personal interests, and foreign companies which had links with Njonjo were charged (and have not denied) with illegally exporting millions of shillings and investing them abroad.

59 Weekly Review, May 27, 1988

60 Cowen (1986), p. 357

61 See Leys (1982), p. 115 and Godfrey (1982), pp. 277-285

62 Curry & Ray (1984), p. 583. There is no possible doubt that Asian capitalists is one beneficiary of denationalization. Only painstaking research can reveal who is 'the public'. Denationalization was effectuated, for instance, in December 1987 with the part denationalization of the Kenya Commercial Bank by selling shares to 'the public' (see Financial Times, 27-9-1988). During 1987, the state owned KENATCO (Kenya National Transport Company) was dissolved and the shares gradually sold to members of 'the public'.

63 Cowen (1986), pp. 358 ff

64 Ibid p. 363. Cowen stresses that the position of the indigenous capitalist class 'now approximates to that of local Asian capital, long portrayed as the exemplary domestic class of capital, not confined to accumulation out of agriculture and capital-in-circulation but the driving force behind the expansion of the domestic base of manufacturing production. Although enterprise of Asian origin did benefit from the removal of racial barriers and other facets of the Kenyatta period it was rarely represented either as a political faction or a fraction of capital in the power bloc of the state and therefore could not guarantee the conditions for its own accumulation. Increasingly, the same can be said of the indigenous class of capital'.

65 Anonymous, 'Kenya: The End of an Illusion', Race and Class, vol. 24, no. 3, 1982, p. 225, also cited in Cowen (1986), p. 360.

66 See Cowen (1986), Curry & Ray (1984) and Tamarkin (1979), although Cowen hesitates to entitle Moi's style of leadership as populist. 'What has been written (by a.o. Leys [1975], p. h) about the Bonapartism and Ceasarsm of the Kenyatta period illuminates more about the characteristics of the Moi regime', Cowen (1986), p. 363.

67 Weekly Review, 17 August, 1982, cited in Cowen (1986), p. 360

68 Weekly Review, 8 October 1982, cited in Cowen (1986), p. 364

69 See Cowen (1986), p. 364 and Killick (1981), p. 106

70 Quoted in Atieno Odhiambo (1989), p. 128

71 Killick (1981), p. 106

72 Cowen (1986), p. 365. In principle, there is nothing against straddling as long as it involves productive investment. Cowen emphasizes that in the early periods of straddling (i.e. in the 1930s) it was linked to sustaining rising levels of consumption needs of the emerging indigenous capitalists, in the present era, straddling continues but in a form which the president abhors because the acquisition of property is no longer linked to the satisfaction of a rising level of consumption needs but linked to concentration of property without productive investment.

Moi takes this seriously as can be concluded from the following events. The first is that after a major cabinet reshuffle in 1983 were Njonjo supporters were removed and demoted to less

powerful posts, Moi included in the letters of appointment to the new ministers a ruling that they cannot hold directorships of any corporations, except those that are honorary (Curry & Ray (1984), p. 580). The second event is based on the rumour in 1987 that when the government decided to make the use of safety belts in motor vehicles compulsory, the measure was immediately suspended when Moi learned that a cabinet minister was involved in a company which produced safety belts. The same rumour, however, also said that Moi himself was personally involved in a company engaged in the importation of safety belts.

73 Weekly Review, May 27, 1988 and Anonymous (1983), p. 225

74 Curry & Ray (1987), pp. 93 and Curry & Ray (1984), pp. 581 ff

75 African Business, July, 1986

76 See a.o. Weekly Review, 8 December, 1987

77 Curry & Ray (1984), p. 573. It is not surprising that in Moi's home district, Nandi, 89.3 % of eligible voters were registered. For Rift Valley Province as a whole the figure was 34.6 %, while only 10.2 % in Nyanza and 19 % Western Province. The figures indicate that KANU is not a mass party and made only few inroads in the West.

78 Weekly Review, October 14, 1988. One of the hot political items in Kenya is the abandoning of the secret voting system in favour of the queuing system. This system means that people vote by queuing in rows behind the candidate. It was introduced by Moi personally and was used in three grassroots party elections and in the 1988 general election. The system has been frequently criticized by the Church. The state-church confrontation, in which Moi personally intervened in favour of the queuing system, rekindled the feeling among politicians that the church in the country was assuming the role of an organized opposition party.

79 See, for instance, Weekly Review, October 14, 1988

80 The police confiscated in August 1982 all books with 'left-sounding titles' in the University Library. In addition, the president ordered that in the future curriculum development will be placed under government supervision.

81 Although freedom of speech and the press is proclaimed in the Constitution, in practice these freedoms can, and have been, narrowly interpreted by the state. The press is increasingly censored by the state and was used on many occasions in government campaigns against 'trouble-makers', anti-Nyayo loyalists (i.e., anti-Moi) and the political opposition. This was not the only time that the press played a dubious role. Also during later events the government-controlled daily paper ventilated numerous biases against the students during protests of students of the University of Nairobi: they were anti-Nyayo, lazy and expressing foreign ideologies. When in December 1987 the University was closed down after riots and all the students sent home, they were not allowed to return to Nairobi unless they signed a statement which stated that they were loyal to the government and its objectives. The same kind of pressure is exerted on many university lecturers of the University of Nairobi.

82 The figures are from Atieno Odhumbi (1988), p. 131, for more details see various issues of the *Review of Political Economy and Country Reports on Human Rights Practices for 1984*, Department of State, Washington DC (1985), pp. 163-173. The famous secret *Mwa Kenya* organization, which name may neither be used by the press nor in letters which individuals send to each other, is frequently used as a reason for chasing dissidents as vigorously as they do in Kenya. Being accused of *Mwa Kenya* membership is enough to be harassed by the police and put behind bars without trial.

83 *Country Reports on Human Rights Practices for 1984*, Department of State, Washington DC (1985), p. 167.

84 Holmquist (1984), p. 12.

85 The TV and written press are always present to inform the *wananchi* on Moi's frequent visits to *jua kali* operations and Harambee drives.

86 Nyayo is Moi's major slogan to gain legitimacy. Nyayo means 'follow the foot steps' and was meant to demonstrate the intention of following in the foot steps of Kenyatta. The slogan later became an independent one and was given the meaning of 'Love Peace and Unity'.

87 Atieno Odhumbi (1989), p. 132. The Weekly Review, October 1988, emphasized that 'a KANU MP will hardly risk facing the ire of the party by taking a dissenting stance'. A recent event is a good example of how, through the KANU-machinery, the regime is able to communicate its endeavours to deal with anti-Nyayo elements (dissidents) to the rural population and to make anti-Nyayo elements enemies of the people. Loyalty demonstrations are frequently held in the countryside, demonstrations during which effigies of dissidents in

- exile 'who smear Kenya's face abroad' are burned or thrown into the sea See *Weekly Review*, November 11, 1988 and *De Volkskrant*, November 15 1988
- 88 Cowen (1986), p 363
- 89 See also Curry & Ray (1984), p 594
- 90 See *Financial Times*, various issues, June/July 1990
- 91 Cowen (1986), pp 377, 378
- 92 Mosley (1986a), p 110
- 93 Bates (1981, pp 94-95) emphasizes that the KNFU fostered a favourable economic climate for producers irrespective of whether they are large or small, Leys (1975, pp 108, 110-113) indicated that due to the KNFU, KFA and other farmer unions the pre-independence privileges of the large farm or estate sector were not abolished after independence and were extended to some of the larger 'small scale' farmers
- 94 Killick (1984) indicated that the connections between IMF and the Kenyan state were no smooth relations The existence of expatriate economic advisers was very easily checked during my visits to the Treasury Name plates on doors revealed this clearly Surprisingly, among these I found a number of names of well-known critics of Kenya's development strategy Some of these feature on the literature list of this book
- 95 See Mosley (1986a), p 113-116 and Ruigu et al (1985)
- 96 Some of these firms are owned by high ranking politicians, e.g. Jaramba Moi and members of Kenyatta's family
- 97 AFR/World Bank (1985), Volume I, Main Report, chapter V, p 16
- 98 For an overview of this debate see Ng'ethe (1984) and *Review of African Political Economy*, no 20, 1981

CHAPTER 9.

EPILOGUE AND FUTURE RESEARCH

Introduction

In this last chapter, some of the major conclusions will be confronted with the theoretical framework worked out in Chapter 1. It is an attempt both to look back and stipulate the need for further research. The theoretical fields for such a research programme will be briefly reviewed.

9.1. Looking back

In the theoretical outline in chapter 1 it was emphasized and promised that a different perspective would be opened on the agrarian question in Kenya. The research was to reveal under what concrete conditions agricultural commodity producers exist, and how these conditions were created by planned intervention by the state. The framework within which to conduct research is an agrarian structure which is seen as shaped by structural processes - commoditization, institutionalization and intervention. In addition, the need was stipulated that the examination of the agrarian question should be taken from an actor perspective, involving struggles between actors. The outcome determines the nature of the agrarian structure.

Drawing upon fieldwork and upon various other sources of information (research reports, academic papers, interviews) we arrived at the following conclusion. The previous chapters underlined that one of the essential properties of Kenya and Nandi's agrarian structure is structural variance or heterogeneity: structural variance in terms of differential degrees of commoditization, diversity in farming styles and farming strategies, regional differentiation and social differentiation of the Kenyan and Nandi peasantry. The conditions, social and technological, under which the Kenyan and Nandi peasantry exist, vary thus considerably. The outcome of the apparently corresponding and unambiguous structural processes of commoditization, institutionalization and intervention in Kenya and Nandi district, is that differential conditions of production and reproduction were created in the past and present.

In section 1.3.4 of Chapter 1, the assumption was put forward that structural variance or heterogeneity of an agrarian structure is reproduced by the three underlying structural processes, generating three social dimensions.

Two of these dimensions have been treated in detail from an historical perspective and on different levels: differential degrees of commoditization and a differentiation in the quality of life of peasant strata, a differentiation which is reinforced by different strategies of farmers to commoditize production as well as by actions of bureaucratic institutions to make farmers focal points of attention corresponding more closely to their institutional perception. It was suggested in the thesis that the development and introduction of hybrid maize technology, which is after all of externalization, was designated for the better-off farmers in the ecologically suitable areas. The

path-diagram, figure 6.7 of Chapter 6, showed clearly, for instance, that hybrid maize did not force a breakthrough in the dependency of agricultural production on climatological conditions and socio-economic differentiation.

The accompaniment of these processes and decisions of farmers to arrange their strategy according to a certain degree of commoditization was the emergence of distinctive farm styles. Different degrees of commoditization clearly coincided with different labour processes in maize farming in Nandi district. One style developed in a land/labour intensive direction; the second style was a labour extensive/machinery and capital intensive way of farming. The first may be called a style based on a strategy of intensification of manual and household labour; the second one clearly has the characteristics of a strategy founded upon capitalization of production. The survey indicated that the emergence of both styles corresponded with a regional variation in the landscape and the pattern of differentiation. The link between farm styles and being categorized as belonging to a certain rural stratum could not be clearly established. Figure 6.4 is an attempt to present this variance graphically. Attempts to link this with the organization of the labour process in maize farming revealed, however, that mode of organization and peasant stratum did not coincide so clearly: farmers belonging to different strata could arrange the same labour process.

This conclusion questions the treatment of strata or class categories and the validity of their use in theories on agrarian change. Three arguments can be put forward in favour of not to analyzing in terms of class categories.

(1). Membership of a certain class category is clouded by the fact that perhaps later, due to a variety of social and climatological conditions, farmers may transfer to another category. The picture of differentiation of the peasantry is, however, valid to express the differences in the quality of life and the social conditions of the Kenyan peasantry, but belonging to a certain class or stratum is not definitive. It is, therefore, hard to speak of rural class formation.

(2). A second argument against using class categories is that these belong to the discourse ideology or the life-world of a researcher. They may not coincide with way farmers interpret their own life-world. These categories, as pointed out in the conclusions to chapter 8, are certainly not part of the Kenyan bureaucracy's way of identifying the agricultural population. The tendency there is to distinguish only between large and small, progressive and non-progressive. Chapters 4 and 6 indicated that such a categorization scheme is inadequate to portray Kenya's agrarian structure. A classification based on different farm styles and strategies would be more appropriate. This could lead to a fruitful, and not purely academic, discussion about abandoning the predominantly one-dimensional agricultural technology policy, implemented by the state since the 1950s and instead, emphasizing viable technologies based on a variety of development perspectives, alternatives emanating from ideas of farmers themselves. These are alternatives which are practised already, but generally are not the ideas which inform Kenyan policy makers.

(3). Using class categories is not entirely compatible with a theoretical framework which prefers to treat human beings as actors. Representatives of this tradition, such as Hindess (1986a,b), warn us of the various abuses of the connotation 'actor'. Classes do not act; human beings and organizations are entities which have the means to reach decisions and to act accordingly. The

tendency towards reification is clearly visible in many theoretical analyses, including this thesis now and then.

This implies that one of the theoretical presuppositions, that is to study agrarian change from an actor perspective rather than from a class or other structural perspective, has not been fully met. Chapter 6 is, so to say, more guided by a desire to analyse agrarian change in Nandi district in terms of structural change - i.e. in terms of commoditization, institutionalization and intervention by external agencies in the conditions of production - than by the desire to portray day-to-day life of the Nandi peasantry. How these structural processes open up or constrain their choices has been demonstrated, but merely from a structural point of view. The precise way in which peasants organize their day-to-day life in terms of socio-culturally defined mechanisms and relations (networks, extended family relations, 'discursive means') was not established in the survey. By not doing this, we showed the tendency to view the Nandi peasantry not as an actor in the real sense of the word, but as an entity reacting differently to structural changes, changes which clearly affect their decision-making process and narrow their alternatives. The quantitative analysis, particularly the interpretation of the path-diagram, forced us, however, to argue that the Nandi peasantry cannot be treated as puppets on a string. They came across as 'capable' as well as 'knowledgeable' in the way they adapted - instead of adopted - new technologies. These and other capabilities of peasants lead me to the conclusion that there exists an enormous development potential. based on a variety of development perspectives, which is not tapped by state policy.

If we return to the major theoretical question, raised by those - Lenin, Kautsky - who applied Marx's analysis of the industrial sector to the agricultural sector, whether it will be fully capitalized in the near future: it is not 'capital' which resolved the inherent dilemmas of agrarian development in Kenya. It is rather the outcome of the Kenya-specific interactions between state enterprises (Kenya Seed Company), state institutions (extension department, marketing boards, price reviewers, credit suppliers, etc.), local entrepreneurs (traders), farmer organizations (KGGCU), capitalist farmers and household producers which determine the way the agrarian question is solved in practice, in the fields and laboratories. The outcome is, as argued earlier, a development pattern which features various rhythms of agrarian change, structural variance or heterogeneity. This is in accordance with one of the presuppositions worked out at the beginning of Chapter 1, although the analysis is more structured by the view from 'above' than from 'below'.

9.2. Other major conclusions

This criticism apart, the research brought forward an essential conclusion. The analysis of the activities and practices of various key agencies in the field of agricultural development, planning and implementation has demonstrated that the essence of Kenya and Nandi's agrarian structure has (upto now) not been identified by key sectors of Kenya's agricultural bureaucracy staffing state institutions, such as the Office of the President, Treasury and the Ministry of Agriculture. These institutions all are involved in the *Annual Price Review* and have a great deal of executive power in defining the terms of marketing, the orientation of agricultural R&D and credit supply. Producer prices move one way, consumer prices move the other way. Agricultural R&D is primarily

oriented towards the introduction of 'modern' technologies. Besides that, food marketing is highly inefficient and a costly operation, causing more harm than good. Two sorts of reasonings were used to put this in the broader perspective of political economy.

In the first place, that certain sectors of the bureaucracy admired the efficient mode of organization in smallholder agriculture (high marketed output, high labour input and moderate to low external inputs) induced a pro-small farm sector policy. These features of smallholder agriculture promised afterall the implementation of policy objectives, such as maximizing output in agriculture and the creation of rural employment opportunities for Kenya's rapidly growing labour force. The relatively large share of smallholders in the production of tea, coffee, cotton, tobacco and milk is a reflection of their success in implementing a smallholder expansion programme. The change of attitude on the part of agricultural policy makers can be seen from the perspective of state-society relations in which the state is 'activated from below'. This happened despite the fact that immediately after independence large farmers were the dominant element in the power bloc of the state and also despite the fact that the success of smallholder agriculture created a shortage of labour across a wide range of farms in the so-called large farm sector (estates, intermediate farms). The relatively large weight of this section of the bureaucracy in the state apparatus is, however, obscured when we incorporate other decision-making processes such as pricing involving the producer price fixation and consumer prices, and the position of agriculture vis-à-vis other economic sectors in general. The annual price reviewers are apparently in a much more powerful position than the pro-small farm bureaucracy. The effect of price regulations on marketed output in smallholder agriculture as well as the trend towards decommodification and changing commercialization strategies of smallholders have been discussed in Chapters 4 and 7. The result of these decision-making processes has led to the conclusion that the annual price reviewers in the Ministry of Agriculture, Office of the President and Treasury were not based on a thorough understanding of smallholder strategies but more guided by furthering interests which have nothing to do with supply or demand. In the interests of the financial status of the state, it would have been a wise decision to come to terms with smallholder farmer strategies.

The staple food sector is an example of a structure which has largely been moulded by relations between state institutions operating in this sector and particular interest groups which command considerable political power in the country: the estate producers. The reaction of these producers to a general deterioration of their conditions of production on the old settler estates in the former White Highlands as a result of the withdrawal of a credit scheme is proverbial: they reduced the production of maize destined for the national market. The immediate danger has been explained in Chapter 7 and has forced the state to re-install that major credit scheme. Apart from favourable credit schemes, these kinds of producers have been well served by the country's R&D system. Wheat production too is dominated, even more than maize, by powerful elements of Kenya's elite (politicians, businessmen, ministers). Even in the colonial period, wheat production was predominantly organized on the basis of (very) large farms with relatively high inputs of capital and labour by influential people such as Lord Delamare. This mode of organization has been

perpetuated ever since. While other countries, such as Ethiopia and India, experimented successfully with wheat growing in small-scale enterprises, in Kenya there has been no attempt to implement such an R&D programme.

The following questions may be raised in this respect about the nature of state institution as actors, although, these questions can only be answered with some degree of guesswork. This is partly because the decision-making process has not been studied but merely the effects of decisions in practice.

Are we dealing with a state which is side-tracked in the fulfilment of its economic functions by social forces in the power bloc of the state, e.g. the ruling elite? Or are we dealing with a state bureaucracy which is not capable of implementing the functions of the state properly.

The answer to the first question is 'yes'. We may characterize certain sectors of the bureaucracy as willing to institutionalize relations with the various segments and ethnic groups in Kenya's agricultural sector, but lamed in the performance of its tasks by the demands of the ruling elite due to representational politics and patronage. The second question may be answered with a 'yes' and 'no'. There are sections in the state bureaucracy which may be regarded as fundamentally unwilling to materialize relations because they are not committed to doing so, and perhaps more importantly, they are incapable of doing so. The way they portray the agricultural population and the organization of R&D and price fixation is proverbial for the situation in Kenya. Other sections of the bureaucracy may be designated as willing and capable but occupy marginalized positions within the hierarchy of the state apparatus.

Common to all these cases is that heterogeneity, so characteristic for agriculture, will continue to exist. The differences are reflected, however, in the underlying patterns of institutionalization and intervention.

The first and third case facilitate state-peasant relations which would foster a diversified pattern of agrarian change and could spread the benefits of commoditization and institutionalization, relations which would be based on an understanding of the structural variance in development patterns and different development perspectives. By so doing, these relations would create possibilities of enhanced production and social welfare. In the second case, the bureaucracy fosters relations which reinforce the existing unequal distribution of the benefits of commoditization and institutionalization.

Although there may be a fundamental change in the nature of state power vis-à-vis society, the political organization of society greatly obstructs the emergence of an atmosphere in which fruitful ideas about technology development in agriculture could be ventilated. Hence there is less involvement and participation of local communities in agricultural research and development programmes. That there is a considerable source of development potential, knowledge and capabilities is documented by the Nandi survey. There is a significant and diversified growth taking place within the niches of the agrarian structure. This too is an element of Kenya's 'emergent structure' which was gradually laid down since the 1950s. The resilience of the middle peasantry despite an often inefficient and ineffective state is a paramount expression of local development potential in agriculture.

9.3. A future research agenda

The research results of the Nandi survey, supported by other research in and outside Kenya, suggest that we should stress the importance of theoretical

models which contribute to a better understanding of structural variance in agrarian economies. In these models, we should pay attention to how policy-makers, institutions, farmers and other key actors operate, decide and act accordingly within the confines of an emerging agrarian structure. The Nandi survey concluded that a considerable source or potential of development is available but not properly tapped. What particular kind of potential, and how it should be tapped, was, however, not identified, that was not the objective of the exercise. Future research should be organized so as to establish that potential and should discover the alternatives emanating from ideas of farmers themselves.

The way farmers organize their labour process is one promising research field. The survey established that various types of labour processes, farm styles and units of production emerged. Each of these types was able, obviously in a variety of ways, to raise the productivity of each unit of land. Commoditization and institutionalization were identified as the shaping processes. These processes were characterized as differential in outcome and taking place within Nandi's agrarian structure.

How exactly this differential process affects the organisation of the labour process and how it is related to certain farm styles requires more systematic and comparative research. An important theoretical research field is in this respect, the relation (if any) between mode of production, forms of production and farm styles. In addition, future research must, despite financial and time constraints, be oriented towards establishing the impact of commoditization and institutionalization in a certain time frame. This means that the Nandi-survey should be repeated within a 5 to 10 year framework and should incorporate, if possible, the same farm enterprises as in 1987.

Equally important is how commoditization affects intra-household relations, i.e., between the farmer and his household (and particularly women and children). The survey was only marginally oriented towards assessing the nature of inter-household relations. Data on female and child labour input, whether family and/or wage labour, were recorded, but are not yet processed. More systematic data collection is needed across a wide range of farms to assess the impact of commoditization and institutionalization on gender relations in agriculture.

A second line of research, closely related to the first, is the way commoditized and non-commoditized relationships in agriculture are interlinked. Various researchers point out that the resilience or sustainability of peasant farming is not undermined by incorporation (see Chapter 1), although it is often simply assumed to be in many theories on agrarian development. Economists tend to interpret it as timely, a characteristic which will disappear in the course of commoditization. Instead, as the survey indicated although it was only a snapshot taken in 1987, commodity- and non-commodity relations are an essential, structural feature of Nandi's agricultural economy. In Chapter 1 it was pointed out that this may be seen as a strategic defence line of peasants against capital and the state. How this defence line is exactly organized could not be established by the survey.

Hindess (1986a,b) and Long (1984, 1989) suggest the investigation of this in the framework of the 'discursive means' of action available to peasants. These discursive means vary considerably and form part of the differentiated stock of local knowledge and resources available to peasants and other key actors. In

this line of research, it is important to appreciate the society's cultural accounts that, on the one hand, guide the orientation of farmers' strategies as well as those of agricultural bureaucrats and entrepreneurs, and on the other hand, structure the social relationships between the actors in an agrarian structure. We should understand and assess how these accounts open up or constrain choice.

Twenty years ago, Mendras (1970) suggested with his '*l'art de la localité*', which embraces more than just agronomic knowledge of farming, soils and genetic varieties but also incorporates the cultural identities of communities, that the converse-side of scientific knowledge is not ignorance. On the contrary, Mendras pointed out that within local and socio-culturally defined agricultural knowledge system, useful knowledge is generated. Extending Mendras' argument to a technology development policy, this implies that development institutions (the local state, international agencies, non-governmental organizations) should build on the stock of local knowledge to develop a more diversified technology package. The National Dairy Development Programme is more or less based on this starting point. The validity of this question has already been raised in the Kenyan context in Chapter 7. The theoretical foundation for such an analysis is rooted in the diversity of farm styles and related strategies which can be recognized in the fields.

This question leads us to a third field of research. Agrarian change must also be analyzed within the larger context of changing politico-economic conditions, such as the effect of state-society relationships which are an intrinsic element of the interaction between state institutions and the farming population. Chapter 8 has emphasized this on the national level. As indicated in the previous section, this kind of research should take account of the existing hierarchy within the state apparatus and how decisions are made. That this is a rather difficult project does not need to be stressed, since it is hard to get access to the key institutions in the decision making process.

Future research should, however, also take place in the regional context of the local state (district authorities) vis-à-vis farmers and other key actors. This research field entails a study of negotiations between the key actors in an agrarian structure, their respective life-worlds and the existing power differentials. This implies that a part of the Nandi survey should be brought on to a higher level and encompass the life-world of extensionists, credit officials and other local administrators.

This research field entails also the question of the countervailing power of local farmer groups and national farmer organizations. Democratization processes must be nurtured, not only to correct existing power differentials, but also in the context of correcting agricultural technology development. As Mendras (1970) and Richards (1985, 1987) suggested, farmers knowledge contributes to development and must not be negated. The essential socio-political condition needed to incorporate this kind of knowledge does not exist in Kenya. The existing trend towards externalization is founded upon a negation of local agricultural knowledge and that the exclusion of farmers from formal agricultural R&D decision-making processes. Because of that, farm labour is continuously expropriated, and farmers increasingly lose control over their labour process.

Research carried out along these analytical lines may contribute towards a better understanding of structural variance and particularly towards an understanding of 'what is happening to the Kenyan peasantry'.

APPENDIX I. THE NANDI SURVEY

The questionnaire was built up to gather empirical data to assess the socio-economic nature of development in the district. Particular emphasis was placed on the degree of commoditization in the district and the nature of institutionalization in the district. These issues were covered by questions about the productive and consumptive reproduction of farm enterprises and the farming community in Nandi. Because the research project was merely confined to gaining insight into the trends in commoditization of staple food production, i.e. of maize (*Bandek* in Nandi or *Mahindi* in Kiswahili), the questionnaire concentrated on a agricultural input and output analysis geared towards understanding maize production. The questionnaire contained, therefore, questions about the organization of the labour process: way of land preparation, time and duration of preparation and planting, how and what kind of seeds are planted and purchased, quantities and method of fertilizing, use of pesticides, method of application, time and manner of weeding and harvesting and yields of maize. The output level was covered by questions about the allocation of the harvest between home consumption and formal marketing outlets in the district for all agricultural activities.

The third basic element in the questionnaire was labour input, whether it was household labour, hired (casual or regular) or exchange labour. The sexual division of labour on the farm was also part of the survey, but the results are not incorporated in Chapter 6, because I decided to focus the analysis on the enterprise level only. The fourth element concerned the important process of straddling and access to off-farm jobs. The fifth, but less important, element was the food purchase and consumption pattern of the household: this in order to assess the rate of integration of consumptive reproduction into the market.

The questionnaire enabled us to gather information on land distribution, time of sale and purchase of land, soil conservation measures applied, household composition, distances to market centres and depots, transport costs, frequency of visits by extension officers and the efficiency of the formal marketing structures as well as the availability of agricultural inputs. On the basis of this survey we were able to indicate what kind of households are advantageously incorporated into the commodity economy and to assess the nature of rural differentiation patterns in the district.

The survey was held at farm level during August, September and October, 1987. Two basic methods were employed as selection criteria which enabled us to draw a stratified sample according to plot sizes and their location in Nandi's agro-ecological zones.

First, in order to gain insight into the impact of the different ecological and natural conditions in the district on farming, we started the process for selecting sub-locations for research with reference to the six main agro-ecological zones where maize production is common. The agro-ecological zones are identified by the famous Farm Management Handbooks for Kenya (1982).

The identification of AEZs are based on altitude and rainfall patterns and to a lesser extent on soil quality. We chose, in consultation with the Assistant District Agricultural Officer, Mrs Kilel, six sub-locations each positioned in a different zone. The following sub-locations were selected for field work: Kapkangani, Kibwareng, Kipsigak, Mosombor, Ndalat and Ndulele. For their location see Map 2.

Secondly, for these sub-locations we classified the farms according to plot sizes. The following categories were constructed: 0-1, 1-2, 2-3, 3-4, 4-5 and 5 ha. and over. The land registration records in Nandi district are, as in any other district, made up by plot numbers, sizes and the name of the plot holder(s). We placed every plot number in a size category and we counted all the plot numbers. We decided to draw a 2-3 % sample which gave us 95 plot numbers and the consequent names of plot holders. Before we drew our stratified sample we excluded all the County Council plots, etc which are mainly for general purposes, such as marketing centres, schools, dips, churches, etc.

Table A.1 gives the farm sizes and distribution for the six selected sub-locations. Table A.2 is the result of the stratified sample and gives the number of interviews we held per farm size and sub-location.

Table A.1. Number of plots according to holding sizes in six selected sub-locations (%)

Sub-location	Plot size categories (ha.)						total
	0-1	1-2	2-3	3-4	4-5	5 and over	
Kapkangani	472 35.9	333 25.4	209 15.9	88 6.7	68 5.2	143 10.9	1313 100/32.4
Kibwareng	63 15.7	90 22.4	76 19.0	45 11.2	36 9.0	91 22.7	401 100/9.9
Kipsigak	128 14.6	152 17.3	149 17.0	121 13.8	116 13.2	211 24.1	877 100/21.6
Mosombor	67 16.7	101 25.3	87 21.7	53 13.3	35 8.7	57 14.3	400 100/9.8
Ndalat	39 9.1	46 10.5	45 10.4	42 9.7	51 11.8	208 48.3	431 100/10.6
Ndulele	82 13.0	75 11.9	94 14.8	69 10.9	68 10.8	244 38.6	632 100/15.6
Total	851 21.0	797 29.7	660 16.3	418 10.3	374 9.2	954 23.5	4054 100/99.9

Source: Ministry of Lands and Settlements, Land registration Department, Nandi District, October 1987

In practice the stratified sample implied that, in every farm size category, we had to sample every forty-first plot number. This method gave us 95 plot numbers; the land registration records gave us names and the situation of the

plots. The land registration also provided sheet/map numbers. This information enabled us, though not without complications, to locate the plots on the excellent topo-cadastral maps of the Survey of Kenya. Table A 2 shows the distribution of plots per size category after sampling.

Table A.2. Distribution of plots after sampling

sub-location	plot size category						total
	0-1	1-2	2-3	3-4	4-5	5-over	
Kapkangani	11	5	6	3	1	3	29
Kibwareng	2	3	-	1	1	2	9
Kipsigak	3	2	3	2	2	4	16
Mosombor	2	4	1	2	1	1	11
Ndalat	1	1	3	-	-	5	10
Ndulele	2	1	2	1	3	6	15
							16.6%
total	21	16	15	9	8	21	90
	23 3%	17 7%	16 6%	10 0%	8 8%	23.3%	99.8%

Table A.3 displays the distribution after the survey was held. It appeared that households owned more than one plot. The sample became accordingly over-biased towards the larger holdings. This is in congruence with the 'normal' distribution of land pattern in Nandi district which clearly has a tendency towards larger farms.

Practical problems

The practical problems attached to this method of selecting farms or plots were twofold. One is that the Land Registration Records were not completely up to date. In many instances a plot had already been sold a long time previously and not reported to the Registration. The new owner was known but the former owner, whose name we found in the Registration, was unknown. But in the end we managed; we knew the exact location of the plot and in many cases old people or village elders were aware of the particular land transaction. This situation occurred especially in Kapkangani sub-location where a lot of land was sold by Nandi people to Luhya from the neighbouring district in the early seventies. The other complication was that some farmers owned more than one plot and in some cases more than we could anticipate on. Some plots we selected, although cultivated, were not inhabited by the owner, he or she was living on another plot. This was frequently the case in Kipsigak, Ndalat and Ndulele sub-location. Another minor problem was that people went under a different name than the one registered in the Land

Table A.3. Distribution of plots after survey

sub-location	plot size category						total
	0-1	1-2	2-3	3-4	4-5	5-over	
Kapkangani	5	7	7	4	2	4	29
Kibwareng	-	2	1	1	1	4	9
Kipsigak	1	2	2	-	1	10	16
Mosombor	-	3	1	4	-	3	11
Ndalat	-	1	-	1	-	8	10
Ndulele	-	-	-	1	3	11	15
							16.6%
total	6	15	11	11	7	40	90
	6.6%	16.6%	12.2%	12.2%	7.7%	44.4%	99.8%

Registration Records in Kapsabet. Furthermore, in some cases, land disputes among farmers and between farmers and the Land Registration Department about plot sizes and/or prices were encountered during the field work. Checking and re-checking of plot sizes were frequently undertaken in the Land Registration Department. This is required a.o. because some farmers cannot show their title deed(s) partly either because they had not collected them or because the title deed(s) were handed over to banks as security for loans.

In the event of an owner being untraceable, the only solution we found in order to deal with these immediate problems in the field, was to select spare plot numbers and plot holders beforehand for every sub-location and holding size category. In practice it meant that the forty-second and/or forty-third in the size category was selected for interviewing. Because of these practical problems, the final result was 90 interviews. Two plot holders were completely untraceable and two plot holders owned more than one plot but both plots were selected already. The spare plots selected before hand were already used. Selecting more spare plots than foreseen was not undertaken, because their certainly is a clear limit in this spare-plot selection procedure. The last interview, it was exactly the last one, was simply lost somewhere in between Ndalat sub-location and our little cramped for space hotel room in Kapsabet.

The interviews were conducted by the author and a student assistant, with the excellent help of two female interpreters who were living in Nandi district.

REFERENCES

- Acland, J., *East African crops*, London/Roma, Longman/FAO, 1971
- Ahmed, I., Kinsey, B., *Farm equipment innovations in Eastern and Central Southern Africa*, Aldershot, Gower, 1984
- Alavi, H., State and class under peripheral capitalism, in: Alavi, H., Shanin, T. (eds), *Introduction to the sociology of "developing societies"*, London, MacMillan, pp., 289-308, 1982
- Alila, P., Kenyan agricultural policy. The colonial roots of African smallholder agricultural policy and services, Nairobi, IDS, IDS Working Paper no. 327, 1977
- Allen, R., Agriculture and industry - a case study of capitalist failure in Northern Nigeria, in: *Journal of Modern African Studies*, vol. 18, no. 3, pp. 427-441, 1980
- Ambler, Ch., Population Movement, social formation and exchange in Central Kenya, in: *International Journal of African Historical Studies*, vol. 18, no. 2, pp. 201-222, 1985
- Amin, S., *Le développement inégal. Essai sur les formes sociales du capitalisme périphérique*, Paris, Les Editions de Minuit, 1973
- Amin, S., Underdevelopment and dependence in Black Africa. Historical origins and contemporary forms, in: *Journal of Modern African Studies*, vol. 10, no. 4, pp. 503-524, 1972
- Anderson, D., Throup, D., Africans and agricultural production in colonial Kenya: the myth of the war as a watershed, in: *Journal of African History*, vol. 26, no. 4, pp. 327-345, 1985
- Anyang' Nyong'o, P., State and society in Kenya. The desintegration of the nationalist coalitions and the rise of the presidential authoritarianism, 1963-1978, in: *African Affairs*, vol. 82, no. 352, pp. 229-252, 1989
- Anyang' Nyong'o, P., Class struggles in Kenya, in: *Mawazo*, vol. 5, no. 2, pp. 25-43, 1983
- Arap Magut, P., The rise and fall of the Nandi Orkoivot, c.1850-1957, in: McIntosh, B.(ed), *Ngano. Studies in traditional and modern East African History*, Nairobi, East African Publishing House, pp. 95-111, 1968
- Arap Tum, N., The functions and organization of the Kenya Seed Company, paper presented during the Sorghum and Millet Seed Production Workshop held in Nairobi, September 13-19, 1987
- Arce, A, Long, N., The dynamics of knowledge interfaces between Mexican agricultural bureaucrats and peasants. A case study from Jalisco, in: *Boletín de Estudios Latinoamericanos y del Caribe*, December, no. 43, pp. 5-31, 1987
- Arroyo, G., Transnacionales et agriculture. Bases theoriques et methodologiques d'un projet, Paris, Centre de Recherche sur l'Amerique Latine et le Tiers Monde, Cahier de Recherche no. 1, 1979
- Arroyo, G., Agriculture and multinational corporations in Latin America, in: Harle, V. (ed), *The Political Economy of Food*, Farnborough, Saxon House, pp. 176-215, 1978
- Ashcoft, J, Chege, M. Röling, N., "Does extension create poverty in Kenya", in: *East Africa Journal*, March, 1972
- Athreya, V., Booklin, G., Djurveldt, G, Lindberg, S., Identification of Agrarian Classes. A Methodological Essay with empirical material from South India, in: *Journal of Peasant Studies*, vol. 14, no. 2, pp. 147-191, 1987

- Atieno Odhiambo, E., Democracy and the ideology of order in Kenya, in: Oyugi, W. et al.(eds), *Democratic theory & practice in Africa*, London, Heinemann/James Currey Publishers, pp. 111-139, 1988
- Austin, J.E., *Agroindustrial project analysis*, Baltimore, Johns Hopkins University Press, 1981
- Bager, T., *Marketing cooperatives and peasants in Kenya*, Uppsala, Scandinavian Institute of Africa Studies, 1980
- Banaji, J., Summary of selected parts of Kautsky's The Agrarian Question, in: Buttell, F., Newby, H.(eds), *The rural sociology of the advanced societies. Critical perspectives*, Montclair/London, Allenheld and Osmun/Croom Helm, pp. 39-83, 1980
- Baran, P., *The political economy of growth*, Harmondsworth, Pelican, 1973
- Bardhan, P. (ed), *The economic theory of agrarian institutions*, Oxford, Clarendon Press, 1989
- Barkan, J., Holmquist, F., *Politics and the peasantry in Kenya. The lessons of Harambee*, Nairobi, Institute for Development Studies, IDS Working Paper no. 440, 1986
- Barker, J., *The politics of agriculture in Tropical Africa*, Beverly Hills, Sage Publications, 1984
- Barracrough, S., et. al., *Food systems and society: problems of food security in the modern world*, Geneva, URISD, 1985
- Bates, R., The politics of agricultural pricing in Sub-Saharan Africa, in: Ergas, Z. (ed), *The African state in transition*, London, MacMillan, pp. 237-262, 1987
- Bates, R., The regulation of rural markets in Africa, in: Commings, S. Lofchie, M., Payne, R. (eds), *Africa's agrarian crisis. The roots of famine*, Boulder, Lynne Rienner Publishers, pp. 37-55, 1986
- Bates, R., *Essays on the political economy of rural Africa*, Cambridge, Cambridge University Press, 1983
- Bates, R., *Markets and states in Tropical Africa - the political basis of agricultural policies*, San Fransisco, University of California Press, 1982
- Bates, R., Pressure groups, public policy and agricultural development. A study of different outcomes, in: Bates, R., Lofchie, M. (eds), *Agricultural development in Africa. Issues of public policy*, New York, Praeger, pp. 170-218, 1980
- Baum, W., Tolbert, S., *Investing in development. Lessons of World Bank experience*, Oxford, Oxford University Press, 1985
- Beckford, G., Induced innovation model of agricultural development: comment, in: Eicher, C., Staatz, J. (eds), *Agricultural development in the Third World*, Baltimore, The Johns Hopkins University Press, pp. 76-82, 1984
- Benvenuti, B., Sociale wetenschappen en het ontwikkelingsvraagstuk, in: *Derde Wereld*, vol. 9, no. 1/2, pp. 99-114, 1990
- Benvenuti, B., On the dualism between sociology and rural sociology: some hints from the case of modernization, in: *Sociologia Ruralis*, vol. 25, no. 3/4, pp. 214-230, 1985
- Benvenuti, B., De technologisch-administratieve taakomgeving (TATE) van landbouwbedrijven, in: *Marquetalia*, no. 5, 1982
- Benvenuti, B., General systems theory and entrepreneurial autonomy in farming: towards a new feudalism or towards democratic planning, in: *Sociologia Ruralis*, vol. 15, no. 1/2, pp. 47-62, 1975

- Benvenutti, B , Mommaas, H, De technologisch-administratieve taakomgeving van landbouwbedrijven Een onderzoeksprogramma op het terrein van de economische sociologie, Wageningen, Agricultural University Wageningen, collegediktaat, 1985
- Bernstein, H , Capitalism and Petty-Bourgeois production class relations and division of labour, in *Journal of Peasant Studies*, vol 15, no 2, pp 259-272, 1988
- Bernstein, H , Capitalism and Petty Commodity Production, London, Open University, Development Policy and Practice Working Paper no 3, 1986
- Bernstein, H , The state and peasantry in Tanzania, in *Review of African Political Economy*, no 21, pp 44-63, 1981
- Bernstein, H , African peasantries A framework, in *Journal of Peasant Studies*, vol 6, July, no 4, pp 420-444, 1979
- Bernstein, H , Notes on capital and peasantry, in *Review of African Political Economy*, no 18, pp 60-73, 1977
- Berry, S , The food crisis and agrarian change in Africa - a review essay, in *African Studies Review*, vol 27, no 2, pp 59-113, 1984
- Bevan, D , Collier, P Gunning J W , *Peasants and governments An economic analysis*, Oxford, Clarendon Press, 1989
- Bigsten, A , *Education and income determination in Kenya*, Aldershot, Gower, 1984
- Bigsten, A , Regional inequality in Kenya, in Killick, T (ed), *Papers on the Kenyan economy*, London, Heinemann, pp 180-191, 1981
- Bigsten, A , *Regional inequality and development A case study of Kenya*, Aldershot, Gower, 1980
- Bigsten, A , Regional inequality in Kenya, Nairobi, Institute for Development Studies, IDS Working Paper no 330, 1977
- Bolhuis, E, Ploeg, J D van der, *Boerenarbeid en stilen van landbouwbeoefening Een socio-economisch onderzoek naar de effecten van incorporatie en institutionalisering op agrarische ontwikkelingspatronen in Italië en Peru*, Leiden, Leiden Development Studies no 8, 1985
- Booth, D , Marxism and development sociology interpreting the impasse, in *World Development*, vol 13, no 7, pp 761-787, 1985
- Boulding, E , Women and food systems an alternative approach to the world food crisis, in Boulding, E (ed), *Women in the twentieth century world*, London, Sage Publication, pp 139-165, 1977
- Brenner, B , The origins of capitalist development a critique of neo-Smithian Marxism, in *New Left Review*, July/August, no 104, pp 25-99, 1977
- Brett, E , Adjustment and the state the problem of administrative reform, in *IDS Bulletin*, vol 19, no 4, pp 4-12, 1988
- Brett, E , State power and economic inefficiency explaining political failure in Africa, in *IDS Bulletin*, vol 17, January, no 1, pp 22-30, 1986
- Brett, E , *Colonialism and underdevelopment in East Africa The politics of change*, London, Heinemann, 1973
- Brewer, A , *Marxist theories of imperialism*, London, Routledge & Keagan Paul, 1980
- Brown, L , *Agricultural change in Kenya, 1945-1960*, Stanford, Stanford University, Food Research Institute, 1968

- Buch-Hansen, M , Agro-industrial production and socio-economic development A case study of KTDA small holder tea production in Buret, Western Kenya, Copenhagen, Institute of Geography, Working Paper no 11, 1980
- Buch-Hansen, M , Agro-industrial production and socio-economic development Case studies of sugar production in Muhoroni and Mumias, Western Kenya, Copenhagen, Institute of Geography, Working Paper no 15, 1980
- Buch-Hansen, M , Kieler, J , The development of capitalism and the transformation of the peasantry in Kenya, in *Rural Africana*, Winter/Spring, no 15/16, pp 13-41, 1983
- Buch-Hansen, M , Marcussen, H , Agro-industrial production and socio-economic development Case from Western Kenya, in *Review of African Political Economy*, no 23, pp 9-37, 1982
- Burbach, R , Flynn, P , *Agribusiness in the Americas*, New York, Monthly Review Press, 1980
- Burmeister, L , The South Korean green revolution induced or directed innovation, in *Economic Development and Cultural Change*, vol 35, no 4, pp 767-791, 1987
- Byres, T , The new technology, class formation and class action in the Indian countryside, in *Journal of Peasant Studies*, vol 8, no 4, pp 405-455, 1981
- Byres, T , Agrarian transition and the Agrarian Question, in *Journal of Peasant Studies*, vol 4, no 3, pp 258-275, 1977
- Byres, T , The dialectics of India's green revolution, in *South Asian Review*, vol 5, no 2, pp 99-117, 1972
- Carlsen, J , *Economic and social transformation in rural Kenya*, Upsala, Scandinavian Institute of African Studies, 1980
- Chambers, R , *Rural development Putting the last first*, London, Longman, 1983
- Charney, G , Political power and social class in the neo-colonial African state, in *Review of African Political Economy*, April, no 38, pp 48-66, 1987
- Chayanov, A , *The theory of peasant economy*, (ed by Thorner, D , et al), Homewood, Irwin, 1966
- Chazan, N et al, *Politics and society in contemporary Africa*, London, MacMillan, 1988
- Chutere, P , Extension education and farmers' performance in improved crop farming in Kakamega District, Kenya, in *Agricultural Administration*, vol 18, no 1, pp 39-55, 1985
- Clairmonte, F , United States food multinationals lessons for the Third World, in *Journal of Contemporary Asia*, vol 11, no 1, pp 62-90, 1981
- Clairmonte, F , Cavanagh, J , Corporate power in selected commodities, in *Raw Materials Report*, vol 1, no 3, pp, 21-40, 1981
- Clayton, A , Savage, D , *Government and labour in Kenya, 1895-1963*, Cambridge, Cambridge University Press, 1974
- Cleave, J , *African farmers Labor use in the development of smallholder agriculture*, New York, Praeger, 1974
- Cliffe, L , Rural class formation in East Africa, in *Journal of Peasant Studies*, vol 4, no 3, pp 195-225, 1977
- Cliffe, L , Coleman, J, Doornebos, M (eds), *Government and rural development in East Africa essays on political penetration*, The Hague, Martinus Nijhoff, 1977
- Cohen, D, Atieno Odhumbi, E , *Siaya The historical anthropology of an African landscape*, London, James Currey Publishers, 1989

- Collier, P , Malfunctioning of African rural factor markets theory and a Kenyan example, in *Oxford Bulletin of Economics and Statistics*, vol 45, no 2, pp 141-173, 1983
- Collier, P , Lal, D , *Labour and poverty in Kenya, 1900-1980*, Oxford, Clarendon Press, 1986
- Collier, P , Lal, D , Why poor people get rich in Kenya, 1960-1979, in *World Development*, vol 12, no 18, pp 1007-1018, 1984
- Colombo, C , Johnson, J , Shusido, A , Reducing malnutrition in developing countries, The Trilateral Commission, report, 1977
- Communs, S K , Lofchue, M L , Payne, R , (eds), *Africa's agrarian crisis The roots of famine*, Boulder, Lynne Rienner Publishers, 1986
- Cooper, F , Africa and the world economy, in *African Studies Review*, vol 24, no 2/3, pp 1-87, 1981
- Cooper, F , *From slaves to squatters Plantation labour and agriculture in Zanzibar and Coastal Kenya 1890-1925*, New Haven, Yale University Press, 1980
- Coquery-Vidrovitch, C , Research on an African mode of production, in Gutkund, P, Waterman, P (eds) in *African Social Studies A radical reader*, London, Heinemann, pp 77-93, 1977
- Cowen, M, Change in state power, international conditions and peasant producers the case of Kenya, in *Journal of Development Studies*, vol 22, no 2, pp 355-385, 1986
- Cowen, M , The commercialisation of food production in Kenya after 1975, in Rotberg, R (eds), *Imperialism, colonialism and hunger East and Central Africa*, Lexington, Lexington Books, pp 199-224, 1983
- Cowen, M , The British state and agrarian accumulation in Kenya, in Fransman, M (ed), *Industry and accumulation in Africa*, London, Heinemann, pp 142-170, 1982a
- Cowen, M , Some recent East African peasant studies, in *Journal of Peasant Studies*, vol 9 , no 2, pp 252-262, 1982b
- Cowen, M , Commodity production in Kenya's Central Province, in Heyer, J , Roberts, P Williams, G (eds), *Rural Development in Tropical Africa*, London, MacMillan, pp 121-142, 1981a
- Cowen, M , The agrarian problem, in *Review of African Political Economy*, no 20, pp 57-74, 1981b
- Cowen, M, Concentration of sales and assets dairy cattle and tea in Magutu, 1974-1971, Nairobi, Institute for Development Studies, IDS Working paper no 146, 1974
- Cowen, M , Kinyanjui, K , Some problems of capital and class in Kenya, Nairobi, Institute for Development Studies, IDS Occasional Paper, 1977
- Cox, P , Implementing Agricultural Development Policy in Kenya, in *Food Research Institute Studies*, vol 19, no 2, pp 153-177, 1984
- Crawford, E , Thorbecke, E , The analysis of food poverty an illustration from Kenya, in *The Pakistan Development Review*, vol 19, no 4, pp 311-356, 1980
- Curry, K , Ray, L , The Kenyan state, agribusiness and the peasantry, in *Review of African Political Economy*, no 38, pp 89-97, 1987
- Curry, K , Ray, L , State and class in Kenya Notes on the cohesion of the ruling class, in *Journal of Modern African Studies*, vol 22, no 4, pp 559-593, 1984
- Dahlberg, K , *Beyond the Green Revolution the ecology and politics of global agricultural development*, New York, Plenum Press, 1979
- Davis, J , The economic effect of windfall gains in export earnings, in *World Development*, vol 11, no 2, pp 119-144, 1983

- Delgado, C. Mellor, J., Blackie, M., Strategic issues in food production in Sub-Saharan Africa, in: Delgado, C., Mellor, J., Blackie, M. (eds), *Accelerating food production in Sub-Saharan Africa*, London/Baltimore, Johns Hopkins University Press, pp. 3-23, 1987
- Delgado, C. Ranade, C., Technological change and agricultural labor use, in: Delgado, C., Mellor, J., Blackie, M. (eds), *Accelerating food production in Sub-Saharan Africa*, London/Baltimore, Johns Hopkins University Press, pp. 118-135, 1987
- Dietz, T., *Pastoralists in dire straits. Survival strategies and external interventions in a semi-arid region at the Kenyan/Uganda border: Western Pokot, 1900-1986*, Amsterdam, Netherlands Geographical Studies no. 49, Instituut voor Sociale Geografie, Universiteit van Amsterdam, 1987
- Dietz, T., Migration to and from dry areas in Kenya, in: *Tijdschrift voor Economische en Sociale Geographie*, vol. 77, no. 1, pp 18-27, 1986
- Dietz, T., Koninx, J., Regionale ongelijkheid in Kenia - en de lokatie van de Nederlandse ontwikkelingsprojecten, Amsterdam, University of Amsterdam, Department of Human Geography, 1984
- Dietz, T., Koninx, J., The Netherlands in Kenya. Development projects in Kenya financed by Dutch development assistance, 1964-1981, Amsterdam, University of Amsterdam, Department of Human Geography, 1983
- Dinham, B., Hines, C., *Agribusiness in Africa. A study of the impact of big business on Africa's food and agricultural production*, London, Earth Resources Research Ltd., 1983
- Dittoh, S., Green revolution or revolution? The case of independent African countries, in: *African Development*, vol. 6, no. 3, pp. 48-74, 1981
- Djurfeldt, G., What happened to the agrarian bourgeoisie and rural proletariat under monopoly capitalism? Some hypotheses from the classics of Marxism on the agrarian question, in: *Acta Sociologia*, vol. 24, no. 3, pp. 167-191, 1981
- Doornbos, M., The African state in academic debate, The Hague, Institute for Social Studies, Dies Natalis, 1989
- Douglas, J. (ed.), *Successful seed programmes: a planning and management guide*, Boulder, Westview Press, 1980
- Drinkwater, M., The state and agrarian change in Zimbabwe's communal areas, Anglia, University of East Anglia, PhD Thesis, 1988
- Duncan, A., The effectiveness of aid to Kenya: a case study, in: *IDS Bulletin*, vol. 17, no. 3, pp. 72-77, 1986
- Eicher, C., Staaz, J. (eds), *Agricultural development in the Third World*, Baltimore, Johns Hopkins University Press, 1984
- Ellis, D., The Nandi Protest of 1923, in: *Journal of African History*, vol. 18, no. 4, pp. 555-575, 1976
- Ennew, J., Hirst, P., Tribe, K., 'Peasantry' as an economic category, in: *Journal of Peasant Studies*, vol. 4, no. 4, pp. 295-323, 1977
- Ergas, Z. (ed), *The African state in transition*, London, MacMillan, 1987
- Ergas, Z., Kenya's special rural development program (SRDP): was it really a failure?, in: *Journal of Developing Areas*, vol. 17, no. 1, pp. 51-66, 1983
- Food Agricultural Organization, *Production yearbook*, FAO, Rome, various years
- Fatton, R., Bringing the ruling class back in. Class, state and hegemony in Africa, in: *Comparative Politics*, vol. 20, April, no. 3, pp. 253-264, 1988
- Fearn, H., *An African economy. A study of the economic development of the Nyanza Province of Kenya, 1903-1959*, London, Oxford University Press, 1961

- Feder, E., The World Bank and the expansion of industrial monopoly capital into under-developed agricultures, in: *Journal of Contemporary Asia*, vol. 12, no. 1, pp. 34-61, 1983
- Feder, E., Monopoly capital and agricultural employment in the Third World, in: *Journal of Contemporary Asia*, vol. 11, no. 2, pp. 135-169, 1981
- Feder, E., Capitalism's last-ditch effort to save underdeveloped agricultures. International agribusiness, the World Bank and the rural poor, in: *Journal of Contemporary Asia*, vol. 7, no. 1, pp. 56-79, 1977
- Feder, G., Just, R., Zilberman, D., Adoption of agricultural innovations in developing countries. A survey, in: *Economic Development and Cultural Change*, vol. 33, no. 2, pp. 255-299, 1985
- Foeken, D., Hoorweg, J., *Seasonality in the Coastal Lowlands of Kenya. Part 2: introduction to seasonality*, Nairobi/Leiden, Ministry of Finance and Planning/ African Studies Centre, Food and Nutrition Studies Programme Report no. 28, 1988
- Forrest, J., The quest for state 'hardness' in Africa, in: *Comparative Politics*, vol. 20, July, no. 4, pp. 423-443, 1988
- Forrest, J., The contemporary African state: a 'ruling class' ?, in: *Review of African Political Economy*, April, no. 38, pp. 66-72, 1987
- Frank, A., *Capitalism and underdevelopment in Latin America*, Harmondsworth, Penguin, 1971
- Franke, R., Power, class and traditional knowledge in Sahel food production, Montclair, Department of Anthropology, Mimeo, 1982
- Franke, R., Chasin, B., *Seeds of famine. Ecological destruction and the development dilemma in the West African Sahel*, Montclair, Allenheld & Osmun, 1980
- Freund, B., Labor and labor history in Africa: A review of the literature, in: *African Studies Review*, vol. 27, no. 2, pp. 1-59, 1984
- Freyhold, M von, *Ujamaa villages in Tanzania. Analysis of a social experiment*, New York/London, Monthly Review Press, 1979
- Friedmann, H., Household production and the national economy: concepts for the analysis of agrarian formations, in: *Journal of Peasant Studies*, vol. 7, no. 2, pp. 158-184, 1980
- Fris-Hansen, E., Seeds of risk, seeds of wealth ?, Copenhagen, Center for Development Research, Draft Research Paper, June 7, 1988
- Furedi, F., The Kikuyu squatters in the Rift valley: 1918-1929, in: Ogot, B. (ed), *Economic and Social History of East Africa*, Nairobi, Kenya Literature Bureau, pp. 180-198, 1976
- Furedi, F., The social composition of the Mau Mau Movement in the White Highlands, in: *Journal of Peasant Studies*, vol. 1, no. 4, pp. 487-506, 1973
- Galli, R. (ed), *The political economy of rural development. Peasants, international development and the state*, Albany, State University of New York Press, 1981
- Garcia, R., *Food systems and society. A conceptual and methodological challenge*, Geneva, UNRISD, Food Systems and Society Series, 1984
- George, S., *Ill fares the land. Essays on food, hunger, and power*, Washington, Institute of Policy Studies, 1984
- George, S., *Feeding the few. Corporate control of food*, Washington, Institute of Policy Studies, 1979
- George, S., *How the other half dies. The real reasons for world hunger*, Harmondsworth, Penguin Books, 1976
- Gerhart, J., *The diffusion of hybrid maize in Western Kenya*, Princeton, Princeton University Press, PhD Thesis, 1976

- Gibbon, P, Neocosmos, M , Some Problems in the Political Economy of 'African Socialism", in Bernstein, H , Cambell, B (eds), *Contradictions of Accumulation in Africa*, London, Sage Publications, pp 153-207, 1985
- Gillette, C , Maize production in a traditional African society Economic rationality revisited, in *Human Organization*, vol 39, no 2, pp 184-187, 1980
- Glaeser, B (ed), *The green revolution revisited*, London, Allen Unwin, 1987
- Glaeser, B (ed), *Factors affecting land use and food production*, Saarbrücken/Fort Lauderdale, Verlag Breitenbach, 1980
- Glover, D , Contract farming and smallholder outgrower schemes in less-developed countries, in *World Development*, vol 12, no 11/12, pp 1143-1157, 1984
- Godelier, M , Infrastructures, societies and history, in *Current Anthropology*, vol 19, no 4, pp 763-772, 1978
- Godfrey, M , Kenya African capitalism or simple dependency?, in Bienefeld, M , Godfrey, M (eds), *The struggle for development national strategies in an international context*, Chichester, John Wiley & Sons, pp 265-292, 1982
- Goodman, D , Redclift, M , Capitalism, petty commodity production and the farm enterprise, in *Sociologia Ruralis*, vol 25, no 3/4, pp 231-248, 1985
- Government of Kenya, *Fifth development plan 1984-1988*, Nairobi, Government Printer, 1983
- Government of Kenya, *The strategy of the fourth development plan, 1979-1983*, in Killick, T (ed), *Papers on the Kenyan economy*, London, Heinemann, pp 90-97, 1981
- Government of Kenya, *First development plan 1966-1970*, Nairobi, Government Printer, 1965
- Greer, J , Thorbecke, E , *Food poverty and consumption patterns in Kenya*, Geneva, ILO, WEP project report, 1986
- Griffin, K , *The political economy of agrarian change*, Cambridge, Cambridge University Press, 1979
- Groosman, A , Meerendonk, J van den, *De nederlandse zaaizaadsector Concentratie, internationalisatie en relatie met de Derde Wereld*, Tilburg, IVO, IRIS-Rapport 22, 1983
- Grosh, B , Performance of development finance institutions in Kenya, 1964-89, Nairobi, Institute for Development Studies, IDS Working paper no 450, 1987a
- Grosh, B , Performance of infrastructural parastatals in Kenya since independence transport, communications and electricity, Nairobi, Institute for Development Studies, IDS Working Paper no 451, 1987b
- Grosh, B , Agricultural parastatals since independence how have they performed ?, Nairobi, Institute for Development Studies, IDS Working paper no 435, 1986
- Gsaenger, H , Schmidt, G , Decontrolling the maize marketing system in Kenya, Nairobi, Institute for Development Studies, IDS Discussion Paper no 254, 1977
- Guyer, J , Household and community in African Studies, in *African Studies Review*, vol 24, no 2/3, pp 87-138, 1981
- Halfani, M , Barker, J , Agribusiness and agrarian change, in Barker, J (ed), *The Politics of Agriculture in Tropical Africa*, Beverly Hills, Sage Publications, pp 35-65, 1984
- Hansen, A, McMullan, D (eds), *Food in Sub Saharan Africa*, Boulder/London, Lynne Rienner Publishers/Pinter Publishers, 1986

- Harrison, M., Maize improvement in East Africa, in: Leakey, C. (ed), *Crop improvement in East Africa*, Farnham Royal, Commonwealth Agricultural Bureau, pp. 21-60, 1970
- Hart, K., *The political economy of West African agriculture*, Cambridge, Cambridge University Press, 1982
- Haude, D., Transnationale Unternehmen, Industrialisierung in der Peripherie und kapitalistische Entwicklung, in: *Peripherie*, no. 21, pp. 6-25, 1985
- Haude, D., Transnational corporations in the Third World. Industrialisation and capitalist development, Paper presented to the ECOZOEK dag, April, 1984, Erasmus University Rotterdam, 1984
- Haude, D., Agribusiness op wereldschaal, in: *Marquetalia*, no. 6, 25-55, 1983
- Haumann, J., An attempt to create space for 'own' projects. The case of milkmarketing in Kericho District, Kenya, Wageningen, Agricultural University Wageningen, 1990.
- Hayami, Y., Ruttan, V.W., *Agricultural development: an international perspective*, Baltimore/London, John Hopkins University Press, 1971
- Hazlewood, A., Income distribution and poverty - an unfashionable view, in: *Journal of Modern African Studies*, vol. 16, no. 1, pp. 81-95, 1978
- Hebinck, P., Ploeg, J.D. van der, Verscheidenheid in de landbouw en technologie-overdracht: een inleiding, in: *Derde Wereld*, vol. 9, no. 1/2, pp. 4-9, 1990
- Hengel, E. van, Waarom technologie zich leent voor kritiek, in: *Spil*, september, no. 61/62, 1987
- Heyer, J., Agricultural development policy in Kenya from the Colonial Period to 1975, in: Heyer, J., Roberts, P. Williams, G. (eds), *Rural Development in Tropical Africa*, London, MacMillan, pp. 90-121, 1981
- Heyer, J., Achievements, problems and prospects in the agricultural sector, in: Heyer, J. et al. (eds), *Agricultural development in Kenya. An economic assessment*, Nairobi, Oxford University Press, pp. 1-33, 1976
- Heyer, J., The origins of regional inequalities in smallholder agriculture in Kenya, 1920-1973, in: *Eastern African Journal of Rural Development*, vol. 8, no. 1/2, pp. 142-182, 1975
- Heyer, J., A survey of agricultural development in the small farm areas of Kenya since the 1920s, Nairobi, Institute for Development Studies, IDS Working Paper no. 194, 1974
- Heyer, J., Waweru, K., The development of the small farm areas, in: Heyer, J. et al. (eds), *Agricultural development in Kenya. An economic assessment*, Nairobi, Oxford University Press, pp. 187-222, 1976
- Heyer, J., Maitha, J., Senga, W. (eds), *Agricultural development in Kenya. An economic assesment*, Nairobi, Oxford University Press, 1976
- Hinderink, J., Afrika's agrarische crisis: voorstellen en vooruitzichten, in: *International Spectator*, March, pp. 176-184, 1986
- Hinderink, J., Sterkenburg, J., Agricultural policy and production in Africa: the aims, the methods and the means, in: *Journal of Modern African Studies*, vol. 21, no. 1, pp. 1-23, 1983
- Hindess, B., Actors and social relations, in: Wardell, M., Turner, S. (eds), *Sociological theory in transition*, London, Allen & Unwin, pp.113-127, 1986a
- Hindess, B., 'Interests in political analysis, in: Law, J., (ed), *A new sociology of knowledge. Power, action and belief*, London, Routledge Kegan Paul, pp. 112-132, 1986b

- Hinga, S, Heyer, J., The development of the large farms, in: Heyer, J. et al. (eds), *Agricultural development in Kenya An economic assessment*, Nairobi, Oxford University Press, pp. 222-255, 1976
- Hoebink, P., *Geven is nemen De geschiedenis van de Nederlandse Ontwikkelingshulp, 1950-1986*, Nijmegen, Stichting Derde Wereld Publikaties, 1988
- Holmquist, F., The state and peasant leverage in Kenya, Boston, Boston University, African Study Center, Working Paper no. 91, 1984
- Holtham, G., Hazlewood, G., *Aid and inequality - British development assistance to Kenya*, London, Croom Helm, 1976
- Hornsby, C., The social structure of the national assembly in Kenya, 1963-1983, in: *Journal of Modern African Studies*, vol. 27, no. 2, pp. 275-296, 1989
- House, W., Killick, T., Social justice and development policy in Kenya's rural economy, in: Ghai, D., Radwan, S. (eds), *Agrarian policies and rural poverty in Africa*, Geneva, ILO, pp. 31-71, 1983
- Huizer, G., *The revolutionary potential of peasants in Latin America*, Lexington, Lexington Books, 1972
- Huizer, G., Mannheim, B. (eds), *The politics of anthropology*, The Hague, Mouton, 1979
- Hunt, D., Poverty and agricultural development in a semi-arid area of Eastern Kenya, in: O'Keefe, Ph., Wisner, B. (eds), *Land use and development*, London/Dakar, African Environment. Special Report no.5, 1977
- Hunt, D., *The impending crisis in Kenya The case for land reform*, Aldershot, Gower, 1984
- Huntingford, G., *The Nandi of Kenya Tribal control in a pastoral society*, London, Routledge and Kegan Paul, 1953
- Huxley, E., *No Easy Way A history of the Kenya Farmers' Association*, Nairobi, East African Standard, 1957
- Hyden, G., *No shortcuts to progress. African development management in perspective*, London, Heinemann, 1983
- Hyden, G., *Beyond Ujamaa The resilience of the peasant mode of production*, London, Heinemann, 1980
- Ikiara, G., Killick, T., The performance of the economy since independence, in: Killick, T. (ed), *Papers on the Kenyan economy*, London, Heinemann, pp. 3-5, 1981
- ILO, *Employment, income and equality - a strategy for increasing productive employment in Kenya*, Geneva, ILO, 1972
- IOV, 'Uitbestede goedbestede', The Hague, Ministry of Foreign Affairs, 1988
- ISNAR, *Kenya's national agricultural research system*, The Hague, ISNAR, 1981
- ISNAR, Kenya. *Agricultural research strategy and plan*, The Hague, ISNAR, Vol. 1 Organization and structure, 1985
- Jabara, G., Agricultural pricing policy in Kenya, in: *World Development*, vol. 13, no. 5, pp. 611-626, 1985
- Jaetzhold, R., Schmidt, H., *Farm management handbooks of Kenya Vol II Natural conditions and farm management, Vol IIA Western Kenya, Vol IIB Central Kenya*, Nairobi, Ministry of Agriculture, 1982
- Jalée, P., *The pillage of the third world*, New York, Monthly Review Press, 1968
- Jansen, K., *State, policy and the economy; with case studies from Kenya and Sri Lanka*, The Hague, ISS, 1982

- Janvry, A de, Why do governments do what they do? The case of food price policy, in Johnson, G, South, E (eds) *The role of markets in the World Food Economy*, Boulder, Westview Press, 185-212, 1983
- Janvry, A de, Dethier, J, *Technological innovation in agriculture The political economy of its rate and bias*, Washington, CGIAR, Study Paper No 1, 1985
- Jessop, B, Accumulation, state & hegemonic projects, in *Kapitalistate*, no 10/11, pp 89-135, 1983
- Jessop, B, *The capitalist state*, Oxford, Basil Blackwell, 1982
- Jorgensen, J, *Uganda A modern history*, London, Croom Helm, 1981
- Juma, C, *The gene hunters Biotechnology and the scramble for seeds*, London, Zed Press, 1989
- Kamppeter, K., Fordismus in der Landwirtschaft. Technologische und gesellschaftliche Polarisation als Zeichen gegenwärtiger Agrarentwicklung in der BRD und in Mexiko, in *Peripherie*, no 22/23, pp 111-137, 1986
- Kaplinsky, R (ed), *Readings on the multinational corporation in Kenya*, Oxford, Oxford University Press, 1978
- Kennedy, P, *African capitalism The struggle for ascendancy*, Cambridge, Cambridge University Press, 1988
- Kessel, J, van, Herwaarden om te overleven productie-ritueel en technologisch betoog bij de Andes volken, in *Derde Wereld*, vol 9, no 1/2, pp 77-99, 1990
- Khapoya, V, Kenya under Moi continuity or change?, in *Africa Today*, vol 27, no 1, pp 17-33, 1980
- Khapoya, V, The politics of succession Kenya after Kenyatta, in *Africa Today*, vol 26, no 3, pp 7-20, 1979
- Killick, T, Kenya, 1975-1981, in Killick, T (ed), *The IMF and stabilisation Developing countries experiences*, London, Heinemann, pp 164-217, 1984
- Killick, T, 'By their fruits ye shall know them' the fourth development plan, in Killick, T (ed), *Papers on the Kenyan economy*, London, Heinemann, pp 97-109, 1981
- Killick, T, Thorne, M, Structural change in the Kenyan economy, in Killick, T (ed), *Papers on the Kenyan economy*, London, Heinemann, pp 20-35, 1981
- Kunsey, B, *Agribusiness and rural enterprise*, Beckenham, Croom Helm, 1987
- Kirk, C, Contracting Out Plantations, Smallholders and Transnational Enterprises, in *IDS Bulletin*, vol 18, no 2, pp 45-52, 1987
- Kitching, G, Politics, method and evidence in the 'Kenya Debate', in Bernstein, H, Cambell, B (eds), *Contradictions of Accumulation in Africa*, London, Sage Publications, pp 115-153, 1985
- Kitching, G, *Class and economic change in Kenya - the making of an African Petite-Bourgeoisie, 1905-1970*, New Haven, Yale University Press, 1980
- Kitching, G, Modes of production in Kenya, in *Review of African Political Economy*, no 8, pp 75-86, 1977
- Kliest, T, Regional and seasonal food problems in Kenya, Nairobi/Leiden, Ministry of Finance and Planning/African Studies Centre, Food and Nutrition Programme, report no 10, 1985
- Kloppenbergh, J, The social impacts of biogenetic technology in agriculture past and future, in Berardi, G Geisler, C (eds), *The social consequences of new agricultural technology*, Boulder, Westview Press, pp 291-322, 1983
- Kloppenbergh, J, Kenney, M Biotechnology, seeds and the restructuring of agriculture, in *The Insurgent Sociologist*, Fall, Special Issue, pp 3-18, 1983

- Kongstad, P., Monsted, M, *Family, labour and trade in Western Kenya*, Uppsala, Scandinavian Institute of African Studies, 1979
- Lacroix, A, *Transformations du procès de travail agricole, incidences de l'industrialisation sur les conditions de travail paysannes*, Grenoble, 1981
- Lamb, G., The neocolonial integration of Kenya's peasants, in: *Development and Change*, vol. 8, no 1, pp. 45-59, 1977a
- Lamb, G., Promoting agrarian change: penetration and response in Muranga Kenya, in: Cliffe, L., Coleman, J. Doornbos, M (eds), *Government and rural development in East Africa. Essays on political penetration*, The Hague, Martinus Nijhof Publishers, pp 171-183, 1977b
- Langdon, S, *Multinational corporations in the political economy of Kenya*, London, MacMillan, 1981
- Latour, B. 'Give me a laboratory and I will raise a world', in: Knorr-Cetina, K., Mulkay, M. (eds), *Science observed perspectives on the social study of science*, London, Sage Publications, pp 141-171, 1983
- Lavrijsen, J., *Rural poverty and impoverishment in Western Kenya*, Utrecht, Rijks Universiteit Utrecht, Utrechtse Geografische Studies no 33, 1985
- Lawrence, P., The political economy of the 'green revolution' in Africa, in: *Review of African Political Economy*, no 42, pp 59-76, 1988
- Lawrence, P (ed), *World recession & the food crisis in Africa*, London, James Currey Publishers, 1986
- Leeuw, W. de., De geschiedenis van een grootschalig irrigatieproject in Kenia, in: *Derde Wereld*, vol 6, no 1, pp 27-49, 1986
- Leeuw, W de., Het Bura irrigatie- en vestigingsproject zelfs geen illusie van ontwikkeling Een analyse van voorbereiding, besluitvorming, uitvoering en consequenties van een grootschalig irrigatieproject in Kenia, Amsterdam, Free University, MSc Thesis, 1985
- Lele, U., Growth of foreign assistance and its impact on agriculture, in: Delgado, C., Mellor, J, Blackie, M (eds), *Accelerating food production in Sub-Saharan Africa*, London/Baltimore, Johns Hopkins University Press, pp. 321-350, 1987
- Lenun, W, The differentiation of the peasantry, in Harriss, J (ed), *Rural development theories of peasant economy and agrarian change*, London, Hutchinson, pp. 134-139, 1982
- Lenin, W., *Het imperialisme als hoogste stadium*, Amsterdam, Pegasus, 1971 (originally 1917)
- Leo, C., *Land and class in Kenya*, Toronto, University of Toronto Press, 1984
- Leo, C., Who benefitted from the Million Acre Scheme? Towards a class analysis of Kenya's transition to independence, in: *Canadian Journal of African Studies*, vol. 15, no 2, pp. 201-222, 1981
- Leo, C., The failure of the 'Progressive Farmer' in Kenya's Million-Acre Settlement Scheme, in: *Journal of Modern African Studies*, vol. 16, no. 4, pp. 619-638, 1978
- Leonard, D., *Reaching the peasant farmer*, Chicago, University of Chicago Press, 1977
- Levi, J., Havinden, M., *Economics of African agriculture*, London, Longman, 1982
- Lewis, L., Berry, L., *African environments and resources*, London, Unwin & Hyman, 1988
- Leys, C., The State and the crisis of simple commodity production in Africa, in: *IDS Bulletin*, vol. 18, no. 3, pp. 45-49, 1987

- Leys, C., African economic development in theory and practice, in: *Deadalus*, vol. 3, Spring, no. 2, pp. 99-122, 1982
- Leys, C. (with Borges, J.), State capital in Kenya: a research note, in: *Canadian Journal of African Studies*, vol. 13, no. 3, pp. 307-318, 1979a
- Leys, C., Development strategy in Kenya since 1971, in: *Canadian Journal of African Studies*, vol. 13, no. 1/2, pp. 296-321, 1979b
- Leys, C., Capital accumulation, class formation and dependency - the significance of the Kenyan case, in: Milliband, R. (ed), *The Socialist Register* 1978, pp. 241-267, 1978
- Leys, C., The 'overdeveloped' post colonial state: a re-evaluation, in *Review of African Political Economy*, no. 5, pp 39-49, 1976
- Leys, C., *Underdevelopment in Kenya. The political economy of neo-colonialism, 1964-1971*, London, Heinemann, 1975
- Leys, C., Interpreting African underdevelopment - reflections on the ILO report on employment, income and equality in Kenya, in: *African Affairs*, no. 289, pp. 419-430, 1973
- Leys, C., Henley, H., Kaplinsky, R., Kenya Debate., in: *Review of African Political Economy*, no. 17 and 19, 1980
- Lijoodi, J., Ruthenberg, H., Income distribution in Kenya's agriculture, in: *Zeitschrift für Ausländische Landwirtschaft*, vol. 17, no. 2, pp. 115-129, 1978
- Linear, M., *Zapping the Third World. The disaster of development aid*, London, Pluto Press, 1985
- Lipton, M., Longhurst, R., *New seeds and poor people*, London, Unwin & Hyman, 1989
- Livingstone, I., *Rural development, employment and incomes in Kenya*, Aldershot, Gower, 1986
- Lofchie, M.F., Africa's agrarian malaise, in: Carter, G., O'Meara, P. (eds), *African independence. The first twenty-five years*, Bloomington, Indiana University Press, pp. 161-188, 1985
- Lonsdale, J., Berman, B., Coping with the contradictions: the developments of the colonial state in Kenya, 1895-1914, in: *Journal of African History*, no. 20, pp. 487-505, 1979
- Lonsdale, J., States and social processes in Africa: a historiographical survey, in: *African Studies Review*, vol. 24, no. 2/3, pp. 139-225
- Long, N., De misvattingen achter de notie van kennisoverdracht, in: *Derde Wereld*, vol. 9, no. 1/2, pp. 19-23, 1990
- Long, N., Conclusion: theoretical reflections on actor, structure and interface, in: Long, N. (ed), *Encounters at the interface. Perspectives on social discontinuities in rural development*, Wageningen, Agricultural University Wageningen, Wageningse sociologische studies 27, pp. 221-245, 1989
- Long, N. (ed), *Encounters at the interface. Perspectives on social discontinuities in rural development*, Wageningen, Agricultural University Wageningen, Wageningse sociologische studies 27, 1989
- Long, N., Sociological perspectives on agrarian development and state intervention, in: Hall, A. Midgley, J. (eds), *Development policies: sociological perspectives*, Manchester, Manchester University Press, pp. 108-134, 1988
- Long, N., Introduction, in: Long, N., *Family and work in rural societies*, London, Tavistock Publications, pp. 1-30, 1984a
- Long, N., *Creating space for change: a perspective on the sociology of development*. Inaugural lecture, Wageningen, 1984b

- Long, N , *An introduction to the sociology of rural development*, London, Tavistock Publications, 1977
- Long, N et al , *The commoditization debate labour process, strategy and social network*, Wageningen, Agricultural University Wageningen, Wageningen Sociologische Studies 17, 1986
- Long, N , Ploeg, J D , van der, New challenges in the sociology of rural development, in *Sociologia Ruralis*, vol 28, no 1, pp 30-42, 1988
- Long, N , Ploeg, J D , van der, Demythologizing planned intervention an actor perspective, in *Sociologia Ruralis*, vol 29, no 3/4, pp 226-250, 1989
- Long, N , Roberts, B *Miners, peasants and entrepreneurs regional development in the central highlands of Peru*, Cambridge, Cambridge University Press, 1984
- Mabogunje, A , *The development proces A spatial perspective*, London, Hutchinson, 1980
- MacDonald, A , *Nowhere to go but down? Peasant farming and the international development community*, London, Unwin & Hyman, 1989
- Mackintosh, M , Fruit and vegetables as an international commodity The relocation of horticultural production and its implications for the producers, in *Food Policy*, November, pp 277-293, 1977
- MacWilliam, S , Some notes on the development of commerce in Nyanza, 1900-1945, Western Australian Institute of Technology, African Studies Working Papers, no 4, 1976
- Magdoff, H , et al , *Wat is imperialisme ?*, Nijmegen, Sun, 1972
- Makokha, J , *Conceptual and management problems - the district focus*, Nairobi, African Press Research Bureau, 1985
- Mamdani, M , Extreme but not exeptional Towards and analysis of the agrarian question in Uganda, in *Journal of Peasant Studies*, vol 14, no 2, pp 191-226, 1987
- Mamdani, M , Peasants and democracy in Africa, in *New Left Review*, April, pp 37-56, 1986
- Mamdani, M , *Politics and class formation in Uganda*, London, Monthly Review Press, 1976
- Mann, S , Dickinson, J , Obstacles to the development of a capitalist agriculture, in *Journal of Peasant Studies*, vol 5, no 4, pp 466-481, 1978
- Mars, T , State and agriculture in Africa A case of means and ends, in *IDS Bulletin*, vol 17, January, no 1, pp 16-22, 1986
- Marx, K , Inleiding en voorwoord van de Grondrisse der kritiek der politische Oeconomie, in *Ter Elfder Ure*, no 17, pp 481-525, 1975a
- Marx, K *Das Kapital*, Volume I and III, Berlin, Dietz Verlag, 1975b
- Marx, K , 'The eighteenth Brumaire of Luis Bonaparte, in Marx, K, Engels, F , *Selected Works*, vol 1, Moscow, Progress Publishers, 1962
- Martin, C J , The agrarian question and migrant labour the case of Western Kenya, in *Journal of African Studies*, vol 11, Winter, no 4,, pp-164-175, 1985
- Matson, A , Reflections on the growth of political consciousness in Nandi, in Ogot, B (ed), *Politics and Nationalism in Colonial Kenya*, Nairobi, East African Publishing House, pp 18-46, 1972
- McGuire, J , Incorporating nutrition objectives in development projects, in Migot-Adhola, S , Nkonyangi, J (eds), *Food and Nutrition Planning in Kenya*, Nairobi, Institute for Development Studies, IDS Consultancy Paper no 4, 1982
- McLoughlin, P (ed), *African food production systems - cases and theories*, Baltimore, Johns Hopkins University Press, 1970

- Meilink, H , *Food consumption and food prices in Kenya A review*, Nairobi/Leiden, Ministry of Finance and Planning/ African Studies Centre, Food and Nutrition Studies Programme Report no 21, 1987
- Meilink, H , *Agricultural pricing policy in Kenya scope and impact*, Nairobi/Leiden, Ministry of Finance and Planning/ African Studies Centre, Food and Nutrition Studies Programme, rep no 11, 1985
- Melkote, S , Agricultural extension and the small farmer Revealing the communication gap in an extension project in Kenya, in *Journal of Developing Areas*, vol 22, no 2, pp 239-252, 1988
- Mellor, J , Desai, G (eds), *Agricultural change and rural poverty*, Baltimore, Johns Hopkins University Press, 1985
- Memon, P , The spatial dynamics of trade and urban development in Kenya during the early colonial period up to 1915, Nairobi, Institute for Development Studies, IDS Working Paper no 78, 1973
- Memon, P , Some geographical aspects of the history of urban development in Kenya, in Ogot, B (ed), *Economic and Social History of East Africa*, Nairobi, Kenya Literature Bureau, pp 130-156, 1976
- Merlier, M , *Le Congo de la colonisation belge à l'indépendance*, Paris, Maspero, 1962
- Miller, N , *Kenya The quest for prosperity*, London/Boulder, Gower/Westview Press, 1985
- Mohuddin, A , *African socialism in two countries*, London, Croom Helm, 1981
- Momanyi, S , European aid to Kenya performance and policies 1974-1981, in Stokke, O (ed), *European development assistance Vol II Third World perspectives on policies and performances*, Oslo, Norwegian Institute of International Affairs, pp 83-117, 1982
- Moody, T , Peasant agriculture, commercial production and employment in Kenya, in *Africa Development*, vol 1, no 2, pp 62-73, 1976
- Moore-Lappe, F, Collins, J , *World hunger twelve myths*, New York, Grove Press, 1986
- Moore Lappe, F , Collins, J , *Food first Beyond the myth of scarcity*, New York, Ballentine Books, 2ed , 1979
- Mosley, P , The politics of economic liberalization USAID and the World Bank in Kenya, 1980-84, in *African Affairs*, vol 85, no 338, pp 107-120, 1986a
- Mosley, P , Agricultural performance in Kenya since 1970 has the Worldbank got it right ? , in *Development and Change*, vol 17, no 3, pp 513-531, 1986b
- Mosley, P , *The settler economies studies in the economic history of Kenya and Southern Rhodesia 1900-1963*, Cambridge, Cambridge University Press, 1983
- Mosley, P , Kenya in the 70's A review article, in *African Affairs*, vol 81, April, no 323, pp 271-278, 1982
- Muchiri, G , Production and use of agricultural machinery in Kenya, in *Industry and Development*, no 9, 1984
- Mukara Ng'ang'a, D , What is happening to the Kenya peasantry, in *Review of African Political Economy*, no 20, pp 7-17, 1981
- Muller, H , Probleme der Entwicklung der afrikanischen Landmaschinenindustrie und der, in *Asien, Afrika, Lateinamerika*, vol 12, no 5, pp 900-911, 1985
- Mureithi, L , Sharma, K , Growth linkages between agriculture and industry in Kenya, in *Journal of Eastern African Research and Development*, vol 14, no 2, pp 147-162, 1984

- Muriuki, G., Central Kenya in the Nyayo Era, in: *African Today*, vol. 26, no. 3, pp. 39-43, 1979
- Mwangi, W., Input supply systems - research agenda for the 1980's in relation to the National Food Policy, Nairobi, University of Nairobi, Department of Agricultural Economics, 1982
- Mwangi, W., Alternatives for improving production, employment and income distribution in Kenyan agriculture, Nairobi, Institute for Development Studies, IDS Discussion Paper no. 273, 1981
- Mwangi, W., Farm level derived responses for fertilizers in Kenya. A research proposal, Nairobi, Institute for Development Studies, IDS Working Paper no. 273, 1974
- Ng'ethe, N., The state and the evolution of the peasantry in Kenyan agriculture: a summary of well known issues, in: *Mawazo*, vol. 5, no. 3, pp. 18-35, 1984
- Njonjo, A., The Kenya peasantry: a re-assessment, in: *Review of African Political Economy*, no. 20, pp. 27-41, 1981
- Norgaard, O., *Kenya in the Social Sciences. An annotated bibliography 1967-1979*, Nairobi, Kenya Literature Bureau, 1980
- NSQCS, The Evaluation Mission on the Kenya Inspection Service for Seeds (Seed Unit Project), Nairobi (1973);
- NSQCS, Position Paper of the Seed Unit Project, Nakuru, November (1982);
- NSQCS, Evaluation Report on Netherlands Assistance to NSQCS, Nakuru/Wageningen, March, 1983;
- NSQCS, Review Report on Netherlands Assistance to NSQCS and the Kenya Seed Sector, Nairobi, September, 1985).
- Ntagi, A., The social aspects of bean production technology in Uganda. An analysis of two knowledge systems, Wageningen, Agricultural University of Wageningen, July, 1990
- Nyonyintono, R., Cultural food systems, in: Migot-Adhola, S., Nkinyangi, J. (eds), *Food and Nutrition Planning in Kenya*, Nairobi, Institute for Development Studies, IDS Consultancy Paper no. 4, pp. 20-56, 1982
- Oasa, O., The political economy of international research: a review of CGIRS's response to criticisms of the 'Green Revolution', in: Glaeser, B. (ed), *The green revolution revisited*, London, Allen Unwin, pp. 13-56, 1987.
- O'Brien, J., Sowing the seeds of famine: the political economy of food deficits in Sudan, in: Lawrence, P. (ed), *World recession & the food crisis in Africa*, London, James Currey Publishers, pp. 193-210, 1986
- Obhudo, R., Waller, P., *Periodic markets, urbanization and regional planning. A case study from Western Kenya*, Westport, Green Wood Press, 1976
- Oboler, R., *Women, men, property and change in Nandi District, Kenya*, Philadelphia, Temple University, PhD. Thesis, 1982
- Odinga, O., *Not Yet Uhuru*, London, Heinemann, 1967
- Okoth-Ogendo, H., Land ownership and land distribution in Kenya's large farm areas, in: Killick, T. (ed), *Papers on the Kenyan economy*, London, Heinemann, pp. 329-339, 1981
- Okoth-Ogendo, H., African land tenure reform, in: Heyer, J. et al. (eds), *Agricultural development in Kenya. An economic assessment*, Nairobi, Oxford University Press, pp. 152-187, 1976
- Onimode, B., *A political economy of the African crisis*, London, Zed Press, 1988

- Oosten, C van, *Farming, food security and savings in Kwale District, Kenya*, Nairobi/Leiden, Ministry of Finance and Planning/African Studies Centre, Food and Nutrition Studies Programme Report no 30, 1987
- Oyugi, W, *Rural development administration A Kenyan experience*, New Dehli, Vikas, 1981
- Paulino, L, The evolving food situation, in Delgado, C, Mellor, J, Blackie, M (eds), *Accelerating food production in Sub-Saharan Africa*, London/Baltimore, Johns Hopkins University Press, pp 23-54, 1987
- Payer, C, *The World Bank. a critical analysis*, New York, Monthly Review Press, 1982
- Pearse, A, *Seeds of plenty, seeds of wants*, Geneva, UNRISD, 1980
- Pearse, A, Technology and peasant production Reflections on a global study, in *Development and Change*, vol 8, no 2, pp 125-159, 1977
- Pelosky, R, Agribusiness in Africa, in *Multinational Business*, no 4, pp 16-27, 1983
- Peterson, S, Neglecting the poor state policy toward the smallholder in Kenya, in Commins, S, Lofchue, M, Payne, R, (eds), *Africa's agrarian crisis The roots of famine*, Boulder, Lynne Rienner Publishers, pp 59-84, 1986
- Philips, A, The concept of development, in *Review of African Political Economy*, no 8, 7-21, 1977
- Ploeg, J D, van der, *Labor, markets, and agricultural production* Boulder, Westview Press, 1990
- Ploeg, J D, van der, Knowledge systems, metaphor and interface the case of potatoes in the Peruvian Highlands, in Long, N (ed), *Encounters at the interface A perspective on social discontinuities in rural development*, Wageningen, Agricultural University Wageningen, Wageningse sociologische studies 27, pp 145-165, 1989
- Ploeg, J D van der, *De verwetenschappelijking van de landbouwbeoefening*, Wageningen, Agricultural University Wageningen, Wageningse Sociologische Studies 22, 1987
- Ploeg, J D van der, The agricultural labour process and commoditization, in Long, N et al, *The commoditization debate labour process, strategy and network*, Wageningen, Agricultural University Wageningen, Wageningse Sociologische Studies 17, pp 24-58, 1986
- Ploeg, J D, van der, Patterns of farming logic, structuration of labour and impact of externalization, in *Sociologia Ruralis*, vol 25, no 1, pp 5-26, 1985
- Plucknett, D, Smith, N, Herdt, R., The Role of International Agricultural Research Centers in Africa, in Hansen, A, Macmillan, D (eds), *Food in Sub-Saharan Africa*, Boulder/London, Lynne Rienner Publications/Pinter Publications, 292-305, 1986
- Plucknett, D, Smith, N, Agricultural research and Third World food production, in *Science*, July, no 217, pp 215-220, 1982
- Potter, J (ed), *Food systems in Central & Southern Africa*, London, University of London, School of Oriental and African Studies, 1985
- Poulantzas, N, *Klassen in het huidige kapitalisme*, Nijmegen, Sun, Sunschrift 109, 1976
- Poulantzas, N, *Political power and social classes*, London, New Left Books, 1975
- Poyck, L, *Ruimtelijk-ekonomische ontwikkeling, sociale differentiatie en kleinschalige bedrijvigheid in Kenya*, Nijmegen, Geografisch en Planologisch Instituut, Nijmeegse Geografische Cahiers no 28, 1985

- Pray, C., Echevarria, R., Transferring hybrid maize technology. The role of the private sector, in: *Food Policy*, vol. 13, no. 4, pp. 366-375, 1988
- Raikes, P., *Modernising hunger: famine, food surplus & farm policy in the EEC & Africa*, London, James Currey/Heinemann, 1989
- Raikes, P., Djurfeldt's 'what happened to the agrarian bourgeoisie and rural proletariat under monopoly capitalism?' A comment, in: *Acta Sociologia*, vol. 25, no. 2, pp. 152-165, 1982
- Raikes, P., *Livestock development and policy in East Africa*, Uppsala, Scandinavian Institute for African Studies, 1981
- Raikes, P., Rural differentiation and class formation in Tanzania, in: *Journal of Peasant Studies*, vol. 5, pp. 285-325, 1978
- Rasmussen, T., The economy of a green revolution in the Southern Highlands of Tanzania, Copenhagen, Center for Development Research, CDR Project Papers A.87.3, 1987
- Republic of Kenya, *Economic management for renewed growth*, Nairobi, Government Printer, Sessional Paper no. 1, 1986
- Republic of Kenya, *Guidelines for development prospects and policies*, Government Printer, Sessional Paper no. 4, 1982
- Republic of Kenya, *The national food policy*, Nairobi, Government Printer, Sessional Paper no. 1, 1981
- Republic of Kenya, *Nandi District development plan, 1984-1988*, Nairobi, Ministry of Finance and Planning, Government Printer, 1983
- Republic of Kenya, *Nandi District development plan, 1979-1983*, Nairobi, Ministry of Finance and Planning, Government Printer, 1979
- Republic of Kenya, Large farm sector study, Vol. 2 and 3, Nairobi, Ministry of Agriculture, Ward Ashcroft and Parkman Ltd, 1977.
- Republic of Kenya, CBS, *The integrated rural survey, 1974-75*, Nairobi, Government Printer, 1977
- Republic of Kenya, CBS, *The integrated rural survey, 1976-79: basic reports*, Nairobi, Government Printer, 1981
- Republic of Kenya, *Some economic case studies of farms in Nandi and West Pokot Districts, 1963-1964*, Nakuru, Ministry of Finance and Economic Planning, Report no. 23, December, 1965
- Republic of Kenya, *Some economic case studies of farms in Nandi District, 1962-1963*, Nakuru, Ministry of Finance and Economic Planning, Report no. 18, February, 1964
- Republic of Kenya, Annual report Nandi District, 1971-1986, Kapsabet Ministry of Agriculture
- Republic of Kenya, CBS, *Economic survey*, Nairobi, Government Printer, various years
- Republic of Kenya, CBS, *Statistical abstract*, Nairobi, Government Printer, various years
- Republic of Kenya, CBS, *Directory of industries 1974*, Nairobi, Government Printer, 1974
- Republic of Kenya, CBS, *Directory of industries 1977*, Nairobi, Government Printer, 1977
- Rey, P. *Les alliances de classes*, Paris Maspero, 1973
- Richards, P., The versatility of the poor: indigenous wetland management systems in Sierra Leone, Cambridge, Paper presented at the African Studies Association conference, September, 1988

- Richards, P, The politics of famine, some recent literature, in *African Affairs*, vol 86, no 342, pp 111-117, 1987
- Richards, P, *Coping with hunger Hazard and experiment in an African rice-farming system*, London, Allen & Unwin, 1986
- Richards P, *Indigenous Agricultural Revolution*, Boulder, Westview Press, 1985
- Richards, P, Ecological change and the politics of African land use, in *African Studies Review*, vol 26, no 2, pp 1-73, 1983
- Richardson, H, An urban development strategy for Kenya, in *Journal of Developing Areas*, vol 15, no 1, 3-25, 1981
- Rogers, B, *The domestication of women*, London, Tavistock Publications, 1980
- Ruigu, G, The Kenya seed industry evolution, current status and future prospects, Paper prepared for the seminar on 'Technology Development and Changing Seed Supply Systems', Tilburg, 22 June, 1988
- Ruigu, G, Schluter, M, Kimuyu, P, A review of the fertilizer import allocation and pricing system, Nairobi, Chemical Engineering Consultants, Fertilizer Infrastructure Improvement Support Report no 9, August, 1985
- Ruvenkamp, G, *De invoering van biotechnologie in de agro-industriële produktie keten*, Utrecht, Jan van Arkel, 1989
- Rundquist, F, *Hybrid maize diffusion in Kenya*, Lund, Liber Books News, 1984
- Ruttan, V., Assistance to expand agricultural production, in *World Development*, vol 14, no 1, pp 39-65, 1986
- Ruttan, V, Hayami, Y, Induced innovation model of agricultural development, in Eicher, C, Staatz, J (eds), *Agricultural development in the Third World*, Baltimore, The Johns Hopkins University Press, pp 59-75, 1984
- Ruttan, V, Induced Innovation and agricultural development, in *Food Policy*, August, pp 196-217, 1977
- Roling, N, Ashcroft, J, Wa Chege, F, The diffusions of innovations and the issue of equity in rural development, in Rogers, E (ed), *Communication and development Critical perspectives*, London, Sage Publications, pp 63-79, 1976
- Safilios-Rothschild, C, Vrouwen en technologie-overdracht, in *Derde Wereld*, vol 9, June, no 1/2, pp, 15-19, 1990
- Saul, J, *The state and social revolution in East Africa*, New York, Monthly Review Press, 1979
- Saul, J, The unsteady state Uganda, Obote and general Amin, in *Review of African Political Economy*, no 5, pp 2-38, 1976
- Saul, J, Woods, R, African peasantries, in Shanin, T (ed), *Peasants and Peasant Societies*, Harmondsworth, Penguin, pp 103-115, 1971
- Scheffer, R, Dutch development aid to Kenya, Nijmegen, Thurd World Centre, Mimeo, 1985
- Schluter, M, Constraints on Kenya's food and beverages exports, Nairobi, Institute for Development Studies, IDS Occasional Paper no 43, 1984
- Schmidt, G, Maize and beans marketing in Kenya The interaction and effectiveness of informal and formal marketing systems, Nairobi, Institute for Development Studies, IDS Occasional Paper no 31, 1979
- Schonheer, S, Mbuga, E, Bean production in Kenya's Central and Eastern Provinces, Nairobi, Institute for Development Studies, IDS Occasional Paper no 23, 1976
- Scott, J, *The weapons of the weak of the everyday forms peasant resistance*, New Haven/London, Yale University Press, 1985

- Seddon, D., Bread riots in North Africa: economic policy and social unrest in Tunisia and Morocco, in: Lawrence, P. (ed), *World recession & the food crisis in Africa*, London, James Currey Publishers, pp. 177-193, 1986
- Seidman, E. (ed), *Handbook of social intervention*, Beverly Hills/London, Sage Publications, 1983
- Sen, A., *Poverty and famines - an essay on entitlement and deprivation*, Oxford, Clarendon Press, 1981
- Sender, J., Smith, S., What's right with the Berg report and what's left of its critics, in: Lawrence, P. (ed), *World recession & the food crisis in Africa*, London, James Currey Publishers, pp. 114-129, 1986
- Senga, W., Kenya's agricultural sector, in: Heyer, J. et al. (eds), *Agricultural development in Kenya An economic assessment*, Nairobi, Oxford University Press, pp. 69-111, 1976
- Shanin, T., Class, state and revolution: substitutes and realities, in: Alavi, H., Shanin, T. (eds), *Introduction to the sociology of "developing societies"*, London, MacMillan, pp. 308-332, 1982
- Sharpley, J., The foreign exchange content of Kenyan agriculture, in: *IDS Bulletin*, vol. 19, no. 2, pp. 16-28, 1988
- Sheriff, A., Trade and underdevelopment, in: Ogot, B. (ed), *Economic and Social History of East Africa*, Nairobi, Kenya Literature Bureau, pp. 1-24, 1976
- Shivji, I., *Class struggles in Tanzania*, London, Heinemann, 1976
- Skocpol, T., *States and social revolutions A comparative analysis of France, Russia, and China*, Cambridge, Cambridge University Press, 1979
- Sklar, R., Democracy in Africa, in: *African Studies Review*, vol. 36, no. 3/4, pp. 11-25, 1983
- Sklar, R., The nature of class domination in Africa, in: *Journal of Modern African Studies*, vol. 17, no. 4, pp. 531-552, 1979
- Smith, L., An overview of agricultural development policy, in: Heyer, J. et al. (eds), *Agricultural development in Kenya An economic assessment*, Nairobi, Oxford University Press, pp. 111-152, 1976
- Sorenson, M., *Origins of European settlement in Kenya*, Nairobi, Oxford University Press, 1968
- Speare, T., *Kenya's past. An introduction to historical method in Africa*, London, Longman, 1981
- Staatz, J., Eicher, C., Agricultural development ideas in historical perspective, in: Eicher, C., Staatz, J. (eds), *Agricultural development in the third world*, Baltimore, Johns Hopkins University Press, pp. 3-33, 1984
- Steeves, J., Class analysis and rural Africa: the Kenya Tea Development Authority, in: *Journal of Modern African Studies*, vol. 16, no. 1, pp. 123-133, 1978
- Suchter, S., *Migrant labour in Kenya capitalism and African response, 1895-1975*, London, Longman, 1982
- Swainson, N., *The development of corporate capitalism in Kenya 1918-1977*, London, Heinemann, 1980
- Swainson, N., The rise of a national bourgeoisie, in: *Review of African Political Economy*, no. 8, pp. 39-56, 1977
- Swynnerton, R., *A plan to intensify the development of African agriculture in Kenya*, Nairobi, Government Printer, 1954
- Tait Davis, J., Development of the small-farm sector in Kenya 1954-1972, in: *Le Geographe Canadien*, vol. 21, no. 1, pp. 32-59, 1977

- Tamarkin, M., From Kenyatta to Moi - the anatomy of a peaceful transition of power, in: *Africa Today*, vol. 26, no. 3, pp. 21-38, 1979
- Third Joint Kenya/Netherlands Evaluation Mission, Kenya, *National Dairy Development Programme*, Nairobi, May, 1986
- Thomas, B., Development through harambee. Who wins and who loses. Rural self-help projects in Kenya, in: *World Development*, vol. 15, no. 4, pp. 463-481, 1987
- Thomas, C., *The rise of the authoritarian state in peripheral societies*, New York, Monthly Review Press, 1984
- Timberlake, R., *Africa in crisis - the causes, the cures of environmental bankruptcy*, London, Earthscan, 1985
- Tostensen, A., Scott, J. (eds), *Kenya. Country study and Norwegian aid review*, Fantoft, The Chr. Michelsen Institute, 1987
- Trigo, E., *Agricultural research organisations in the developing world: diversity and evolution*, The Hague, ISNAR, 1986
- Uzoigwe, G., Precolonial markets in Buyoro-Kitara, in: Ogot, B. (ed), *Economic and Social History of East Africa*, Nairobi, Kenya Literature Bureau, pp. 24-67, 1976
- Vandemoortele, J., The public sector and the basic-needs strategy in Kenya: the experiences of the 1970's, ILO, Geneva, WEP 2-32/WP.46, 1983
- Vandemoortele, J., Income distribution and poverty in Kenya - a statistical analysis, Nairobi, Institute for Development Studies, IDS Discussion Paper no. 275, 1982
- Vandergeest, P., Commercialization and commoditization: a dialogue between perspectives, in: *Sociologia Ruralis*, vol. 28, no. 1, pp. 7-30, 1988
- Vengroff, R., Farah, A., State intervention and agricultural development in Africa: a cross-national study, in: *Journal of Modern African Studies*, vol. 23, no. 1, pp. 75-85, 1985
- Wallace, I., Towards a geography of agribusiness, in: *Progress in Human Geography*, vol. 9, no. 4, pp. 491-515, 1985
- Walter, B., The territorial expansion and organisation of the Nandi, 1850-1905, Ohio, Ohio University, Center for International Studies. Papers in International Studies African Series no. 9, 1981
- Wessel, F., Hantman, M., *Trading the future. Farm exports and the concentration of economic power in our food system*, San Francisco, Institute for Food and Development Policy, 1983
- Wilde, J. de, Price incentives and African agricultural development, in: Bates, R., Lofchie, M. (eds), *Agricultural development in Africa. Issues of public policy*, New York, Praeger, pp. 46-67, 1980
- Wilde, J. de, Case studies: Kenya, Tanzania, and Ghana, in: Bates, R., Lofchie, M. (eds), *Agricultural development in Africa. Issues of public policy*, New York, Praeger, pp. 113-170, 1980
- Williams, G., Imperialism and Underdevelopment: A Critique, in: *World Development*, vol. 6, no.7/8, pp. 925-937, 1978
- Wood, R., Foreign aid and the capitalist state in underdeveloped countries, in: *Politics and Society*, vol. 10, no. 1, pp. 1-35, 1980
- Working Party on Government of Expenditures - Ndegwa report, *Report and recommendations of the Working Party*, Nairobi, Government Printer, 1982
- World Bank, *Sub-Saharan Africa: from crisis to sustainable growth*, Washington, World Bank, 1989a

- World Bank, *World Development Report 1989*, New York, Oxford University Press, 1989b
- World Bank, Kenya. Agricultural inputs review. Vol. 1 en 2, Nairobi, World Bank, Eastern Africa Projects (white cover), 1985
- World Bank, *Towards sustained growth in Sub-Saharan Africa*, Washington, World Bank, 1984a
- World Bank, Kenya. Agricultural sector report. Vol. II, Nairobi, World Bank, Eastern Africa Projects Report no. 4629-KE, 1984b
- World Bank, *World Development Report 1982*, New York, Oxford University Press, 1982a
- World Bank, Growth and structural change in Kenya. A basic economic report, Nairobi, World Bank, Eastern Africa Projects Report no. 3350-KE, 1982b
- World Bank, Kenya. Grain sector survey, Nairobi, World Bank, Eastern Africa Projects Report no. 4106-KE, 1982c
- World Bank, *Accelerated development in Sub-Saharan Africa. An agenda for action*, Washington, World Bank, 1981
- World Bank, *The economic development of Kenya*, Baltimore, Johns Hopkins University Press, 1963
- Wyeth, P, Economic development in Kenyan agriculture, in: Killick, T.(ed), *Papers on the Kenyan economy*, London, Heinemann, pp. 295-299, 1981
- Young, C., Patterns of social conflict: state, class and ethnicity, in: *Daedalus*, Spring, pp. 71-99, 1982
- Youé, C., Settler capital and the assault on the squatter peasantry in Kenya's Uasin Gishu District, 1942-63, in: *African Affairs*, vol. 87, no. 348, pp. 393-419, 1987
- Zwanenberg, R. van, *Colonial capitalism and labour in Kenya 1919-1939*, Nairobi, East African Publishing House, 1975
- Zwanenberg, R. van, Neocolonialism and the origin of the national bourgeoisie in Kenya between 1940 and 1973, in: *Journal of East African Research and Development*, vol. 4, no. 2, pp. 161-189, 1974a
- Zwanenberg, R. van, The development of peasant production in Kenya, 1922-1940, in: *The economic history of Kenya*, 2nd series, vol. 27, no. 3, 1974b
- Zwanenberg, R. van, *The agricultural history of Kenya to 1939*, Nairobi, East African Publishing House, 1972
- Zwanenberg, R. van, King, A., *An economic history of Kenya and Uganda, 1800-1970*, Nairobi, East African Publishing House, 1975

Periodicals/Journals:

African Business
De Volkskrant
NRC-Handelsblad
Financial Times
Weekly Review

Paul Hebinck was born in Enschede on the 19th January, 1953. He obtained the H.B.S.-b diploma from Jacobus College, Enschede in 1971. He started to study Human Geography in 1973 and obtained his doctorale degree in 1982 with the geography of developing countries, planning in developing countries and rural geography as specialisms. Since 1984 he is lecturer at the Third World Centre of the Catholic University of Nymegen where he teaches on agrarian problems in Africa. Since 1989 he also part-time attached to the Department of Sociology of Rural Development of the Wageningen Agricultural University. He is one of the founding members and editors of the journal *Derde Wereld* (Third World) and of the book series *Derde Wereld Boeken* (Third World Books), published by the Stichting *Derde Wereld Publikaties* (Foundation for Third World Publications).

Deze studie behandelt de landbouw ontwikkelingen in Kenia. In deze analyse staat de regionale en nationale agrarische structuur centraal. Welke eigenschappen kunnen we toedichten aan deze structuur? De rol van de staat is hierin essentieel. Waarom intervenueert de staat in de landbouw, en hoe, met welke daarvoor speciaal gecreëerde instrumenten en instituties? Hoe probeert zij de ontwikkelingen in deze belangrijke economische sektor te sturen? Hoe succesvol was zij daarbij? Een belangrijke vraag is hierbij in hoeverre de staat de eigenschappen van de Kenia's agrarische structuur adequaat onderkent. Teneinde deze evaluatie-studie uit te voeren werd een regionaal onderzoek uitgevoerd om de effectiviteit en doeltreffendheid van overheidsbeleid ten aanzien van de landbouwsector in beeld te brengen. Tevens wordt uitgebreide literatuurstudie verricht.

In het eerste hoofdstuk wordt het theoretisch kader uitgewerkt voor deze analyse. Daarmee wordt tegelijkertijd het onderwerp van de studie afgebakend. Relevante concepten worden in dit hoofdstuk uiteengezet. In dit theoretisch raamwerk zijn de staatsinstituten, het boerenbedrijf, de boerenbevolking en andere actoren in het ontwikkelingsproces van de landbouw uitgangspunt van analyse. Gesteld wordt dat een analyse van het functioneren van een boerenbedrijf alsmede het wel en wee van de landbouwbevolking niet los gezien kan worden van een netwerk van relaties dat zich ontwikkelt tussen boerenbedrijven, instituties en markten. Het proces waarin bedrijven en mensen geïntegreerd worden in een dergelijk netwerk, heeft noodzakelijkerwijs een historische grondslag maar is ook diskontinue. Afhankelijk van de historische context leidt dat proces tot verschillende patronen en cycli van agrarische ontwikkeling.

Twee belangrijke vooronderstellingen hebben de zoektocht naar een geschikt theoretisch kader voor deze studie gestuurd. De eerste vooronderstelling was dat er een incorporatie van boerenbedrijven, de landbouwende bevolking, landen en regio's in een groter (soms wereldwijd) politiek, economisch en cultureel geheel. De ontwikkeling en expansie van het kapitalisme dat geleidelijk de landen, regio's, bedrijven en mensen integreert in de internationale kapitalistische arbeidsverdeling, wordt gezien als een onderliggende rationaliteit. De tweede vooronderstelling was dat een nauwkeurig onderzoek van incorporatie-processen het eerder genoemde historische specifieke en het diskontinue van dit proces blootlegt. Bovendien dat achter die incorporatie - een regionaal en sociaal-economisch gedifferentieerd ontwikkelingspatroon schuilgaat. Anders gezegd, incorporatie-processen verlopen niet volgens universele wetten en kennen geen van te voren vastgelegde, lineaire ontwikkelingspatronen. Het onderkennen van heterogeniteit en variatie in ontwikkelingspatronen in de landbouw en dus het onderkennen van tal van ontwikkelingsperspektieven, is essentieel voor het analyse-kader van dit proefschrift.

Dit houdt meteen ook in dat de uitgangspunten van veel Marxistische en neo-Marxistische theoretische kaders ter discussie gesteld dienen te worden. Het 'Agrarische Vraagstuk', onderwerp van veel klassieke studies, dient opnieuw geformuleerd te worden. Terwijl de klassieken zich bezig hielden met de vraag hoe het gezinsbedrijf overleefde binnen het kapitalisme, is het nu relevanter en aktueller de vraag te stellen onder welke omstandigheden er in de landbouw geproduceerd wordt en hoe, en door wie deze produkten voorwaarden gecreeerd worden. De theoretische achtergrond voor een dergelijke herformulering is dat andere 'wetten' dan die van de klassenstrijd en de bewegingswetten van het kapitaal uitgangspunten voor analyse dienen te zijn. Met referentie naar het ideeën-goed van de aktor-gerichte benadering van de ontwikkelingssocioloog Long dient er eveneens rekening gehouden met politieke en culturele 'wetten'. De leefwereld van boeren, de manier waarop zij deze interpreteren, de invloed van andere aktoren daarop en de perceptie die zij hebben van ontwikkelingen in de landbouw, moeten in de beschouwing worden meegenomen. Aktoren als handelaars, overheidsambtenaren, industrielen, bankiers, boerenorganisaties, ondernemerorganisaties, multilaterale en bilaterale ontwikkelingsinstituten oefenen allen hun invloed uit op de ontwikkelingen in de landbouw, of proberen dat althans. Zij proberen onderlinge relaties te beïnvloeden en specifieke (technologische, sociale, economische, culturele) voorwaarden te scheppen voor produktie en reproductie. Slechts gezien vanuit een dergelijk kader kunnen ontwikkelingen in de landbouwsector worden begrepen. Vanuit de zo ontstane kennis of wetenschap kan worden gediscussieerd over de uitgangspunten van het 'hoe, waar en waarom' van het ingrijpen in de landbouwsector.

Het centrale concept voor een dergelijke analyse is een agrarische structuur. Een agrarische structuur is kortweg een regionaal of nationaal produktesysteem bestaande uit verschillende vormen van produktie welke ondersteund en/of gekonditioneerd worden door een complex en dynamisch netwerk van technologisch-administratieve instituties, de natuurlijke hulpbronnen en andere produktie faktoren. Tevens omvat een agrarische structuur de onderlinge relaties tussen economische sektoren, de wetgevende en politieke instituties en de verschillende sociale klassen en categorieën in de regio. Een agrarische structuur wordt vorm gegeven door een drietal strukturele processen: 'commoditisering', institutionalisering en interventie, alsmede door de politieke, economische en ideologische strijd tussen verschillende aktoren.

Onder 'commoditisering' wordt verstaan het proces waarbij de ruilwaarde een toenemende invloed gaat uitoefenen op de ekonomie, op de organisatie van de produktie en reproductie. 'Commoditisering' omvat zowel commercialisering (produktie wordt in toenemende mate marktgericht) als kapitalisering (landbouw inputs nemen steeds meer de vormen aan van waren) van de produktie. Een korte makro-analyse van de geschiedenis van incorporatie in Afrika leert dat deze in twee fasen kan worden verdeeld. De eerste is er een van een toenemende commercialisering van de produktie. Marktgerichte produktie werd gestimuleerd door maatregelen van de koloniale staat, alsmede door aktiviteiten van agro-industriële bedrijven, handelaars en de Afrikaanse boerenbevolking zelf. De tweede fase kenmerkt zich door een toenemende kapitalisering van de produktie. Als gevolg van

landbouwkundig onderzoek en ontwikkeling (R&D), die op een verhoging van de produktiviteit in de landbouw waren geënt, kwam de introductie van nieuwe technologieën in de landbouw op gang. Deze nieuwe mogelijkheden werden actief door de boeren in het arbeidsproces geïntegreerd; ondanks dat dit een vergrote afhankelijkheid van de markt met zich mee bracht.

Institutionalisering is het historische proces van een arbeidsverdeling en een zekere mate van specialisatie tussen sectoren van de economie alsmede tussen producenten en produktieve eenheden. Verschillende actoren nemen gedurende dit proces een bepaalde plaats in binnen deze arbeidsverdeling. Het geheel van actoren en hun onderlinge relaties wordt ook wel de technologisch-administratieve taakomgeving van de landbouw genoemd. Deze taakomgeving berust op de eerder genoemde processen van commercialisering en kapitalisering van de produktie in de landbouw. Vanuit een historisch perspectief bezien, wordt de taakomgeving van de landbouw steeds complexer: het aantal actoren neemt toe en hun onderlinge relaties worden steeds intensiever en gevarieerder.

Het begrip interventie is een begrip met een weidse strekking. Onder interventie wordt hier verstaan, het politieke en ideologische proces waarbij de verschillende actoren, involge eigen percepties en mogelijkheden, invloed proberen uit te oefenen op de voorwaarden van produktie in de landbouw. Deze actoren kennen verschillende motieven om te interveniëren. Essentieel is dat de actoren vanuit verschillende machtsposities opereren. In deze zin opgevat, omvat interventie zowel het ingrijpen van van individuen, organisaties, bedrijven en van dat de staat; tegelijkertijd vervat het sociale, kulturele, economische en ekologische aspecten. Het meest bekende interventie-programma is de Groene Revolutie, een externe interventie in de landbouw met als doel om via 'commoditisering' en institutionalisering te komen tot een produktiegroei in de landbouw in de Derde Wereld.

Een analyse van een agrarische infrastructuur laat een essentieel kenmerk zien: een structurele verscheidenheid of heterogeniteit. Heterogeniteit in de landbouw is noch een toevallig verschijnsel noch een tijdelijk verschijnsel. Heterogeniteit wordt in dit proefschrift gezien als uitkomst van drie structurele complexen die konstant, door interventie, 'commoditisering' en institutionalisering, worden gereproduceerd. Heterogeniteit is, in de eerste plaats, inherent aan de landbouw, immers elk landbouwstelsel kent zijn eigen 'l'art de la localite'(deze term is afkomstig van Mendras (1970)). Dit omvat meer dan alleen maar landbouwkundige kennis van de bodem, gewassen en klimaat, maar tevens ook de kulturele identiteit van boeren. In de tweede plaats, is heterogeniteit een structureel kenmerk van de landbouw. Boerenhuishoudens en -bedrijven onderhouden verschillende relaties met markten en instituties als gevolg waarvan diverse bedrijfsstijlen zich ontwikkelen elk met een eigen rationaliteit. In de derde plaats, worden landbouw economieën gekenmerkt door het bestaan van enorme sociale verschillen in rijkdom en macht. Bovendien onderscheiden landbouwregio's zich van elkaar doordat ze op verschillende wijzen geïncorporeerd zijn in de markt.

Van groot belang is het daarom vast te stellen hoe een dergelijke agrarische infrastructuur tot stand is gekomen, hoe daarbinnen de relaties tussen boeren en staatsinstituties zich uit kristalliseerden, en hoe, als gevolg van 'commoditisering', institutionalisering en interventie, de structurele

verscheidenheid bestendig wordt en verdiept. Dit heeft tevens tot de formulering van de centrale onderzoeksvraag van de studie geleid. Deze luidt "hoe is in Kenia de agrarische structuur tot stand gekomen en welke actoren geven vorm aan deze structuur."

In de Afrikaanse en in het bijzonder in de Keniaanse context, bezit de staat - de koloniale en post-koloniale - de uitvoerende macht en beschikt eveneens over de fysieke mogelijkheden om een fundament te leggen voor een agrarische structuur. Op basis daarvan vinden productie en reproductie plaats en wordt ontwikkeling gegenereerd. Daarom is het niet verwonderlijk dat het landbouwbeleid van de Keniaanse staat centraal gesteld is in dit proefschrift. Landbouwbeleid wordt gezien als een specifieke vorm van interventie die naast de landbouw ook verschillende andere economische sectoren en sub-sectoren treft.

Een begrip van de staat en zijn functioneren is aldus vereist. De staat wordt hier gezien als een ensemble van verschillende instituties die beleidsdoelstellingen formuleren, diensten verlenen, nauw betrokken zijn bij landbouwkundig onderzoek, productieactiviteiten reguleren door middel van controle over markten en prijzen. De staat is in de uitvoering van zijn functies nauw betrokken bij het creëren van de technologische en economische voorwaarden van productie en reproductie in de landbouwsector. Machtsverhoudingen en relaties tussen staat, staatsbureaucratie en samenleving zijn van grote invloed op de wijze waarop de staat beleidsdoelstellingen en beleidsinstrumenten alsook de interventie in de landbouw vorm geeft. In het onderzoek naar het functioneren van de staat moet een relatieve autonomie van de staat ten opzichte van de heersende klassen niet worden uitgesloten. Evenals boeren worden staatsbureaucraten in dit proefschrift gezien als actoren die naar eigen normen en waarden ontwikkelingsprocessen kunnen stimuleren en trachten te beheersen. Daarnaast moeten externe relaties - internationale markten en bilaterale en multilaterale hulp - bij de analyse van de staat in Derde Wereldlanden worden betrokken. Immers, sinds de Afrikaanse staten onafhankelijk zijn geworden spelen externe ontwikkelingsinstituties een belangrijke rol bij het tot stand komen van technologische en administratieve kaders waarbinnen productie en reproductie in de landbouw zich afspelen.

De tweede centrale onderzoeksvraag richtte zich dan ook op de effectiviteit en doelmatigheid van het staatsingrijpen in de landbouw. Dit heeft zowel betrekking op de instrumenten (prijz- en technologiebeleid bijvoorbeeld) als op het effect ervan. Als test-case voor die effectiviteit en doelmatigheid dient Kenia's National Food Policy. Dit beleid omvat behalve overdracht van nieuwe technologie en kennis, een veelvoud van overheidsmaatregelen zoals op het terrein van markt- en prijsbeleid. Welke belangen zijn met dit ingrijpen gediend en welke resultaten zijn er mee behaald? Zijn deze uitkomsten van staats ingrijpen bedoeld dan wel onbedoeld?

Beide onderzoeksvragen worden op twee niveaus uitgewerkt: het nationale en regionale niveau. Voor dit doel is sinds 1984 relevant materiaal verzameld, aangevuld met diverse bezoeken aan belangrijke overheidsinstituties in Nairobi. In het Nandi District is gedurende de tweede helft van 1987 een onderzoek onder boerenbedrijven verricht. Bovendien zijn de activiteiten van belangrijke lokale staatsinstellingen en andere actoren in kaart gebracht.

Hoofdstuk 2 is een rekonstruktie van de ontwikkelingen in de landbouwsector in Kenia in de voor-koloniale en koloniale periode. De koloniale staat heeft na de inlijving van Kenia in 1895 in het Britse imperium een enorm belangrijke rol in de landbouw gespeeld. De Keniaanse geschiedenis van de landbouw wordt gerekonstrueerd aan de hand van een periodisering van de historie van de staat in Kenia. In verschillende perioden zijn verschillende staat-burokratiemaatschappij-verhoudingen te signaleren. De ontwikkelingen gedurende de koloniale periode zijn van essentieel belang voor een begrip van huidige ontwikkelingen. Immers de koloniale geschiedenis laat niet alleen een toename in de relatieve autonomie van de staat ten opzichte van een sektor van de toenmalige heersende klassen (de blanke kolonisten) zien. Daarnaast komt er ook een kapitaalbezittende klasse in met name de landbouw- en handelssector, op vanaf de jaren dertiger wanneer de warenproductie in de landbouw en warenrelaties op het platteland (in de zgn. Reserves) expanderen. De wortels van Kenia's huidige heersende klasse liggen in deze periode. Politieke en vooral economische onrust leiden in de jaren vijftig tot massale hervormingen in de politieke en economische sfeer. De politieke macht van de blanke kolonisten, tanende sinds de wereldwijde depressie in de jaren dertig, wordt in toenemende mate aangevochten door zowel de koloniale staat en de Britse staat alsmede door internationale en Afrikaanse belangengroepen. Een vergrote deelname van zowel kleine als grote Afrikaanse boeren en een niet meer te stuiten politiek proces ter verkrijging van de onafhankelijkheid, zijn de belangrijkste uitkomsten van het hervormingsproces. Kenia wordt in december 1963 een onafhankelijke staat onder leiding van een Afrikaanse regering.

In hoofdstuk 3 worden het overheidsbeleid, de doelstellingen en de beleidsinstrumenten op het terrein van de landbouw na de onafhankelijkheid uit de doeken gedaan. De leidende rol van de staat in het ontwikkelingsproces wordt politiek en economisch gelegitimeerd met de frase dat van nu af aan de ontwikkelingen geleid worden door en ten goede moeten komen aan Kenianen. Diverse instrumenten en instituties worden geërfd van de koloniale staat en nieuwe worden gecreëerd. De wortels van het huidige landbouwbeleid liggen bij de hervormingen van de jaren vijftig en bij de uitvoering van het toenmalige koloniale ontwikkelingsbeleid (verwoord in het zogenaamde Swynnertonplan).

Bij alle bevolkingsgroepen zijn er hooggespannen verwachtingen over het landbouwbeleid van de nieuwe staat. Gedurende het eerste decennium droegen een fenomenale groei in de produktie van waren en buitengewoon gunstige externe factoren (hoge wereldmarktprijzen voor de voornaamste exportgewassen) bij tot politieke rust en economische vooruitgang. Als in het midden van de jaren zeventig de externe factoren ongunstig worden, worden de mogelijkheden van de staat voor het voeren van een effectief landbouwbeleid ook geringer. Staatsinkomsten dalen sterk waardoor diverse beleidsdoelstellingen bijgesteld dienen te worden en diverse aanspraken op overheidssteun niet langer gehonoreerd kunnen worden. Anderzijds wordt de afhankelijkheid van Kenia van buitenlandse hulp steeds groter en daarmee de verhoogde externe bemoeienissen met nationaal beleid.

De centrale kenmerken van het landbouwbeleid zijn allereerst dat door een gericht technologie-overdracht-, markt- en prijsbeleid (dat wil zeggen

'commoditisering' en institutionalisering door middel van overheidsinterventie) de productie van voedsel voor de binnenlandse markt en van exportgewassen wordt gestimuleerd. Ten tweede, moet de landbouwsector zich dusdanig ontwikkelen dat de werkgelegenheid van de sterk groeiende plattelandsbevolking wordt verzekerd. Ten derde, wil de staat, meer dan voorheen het geval was zo blijkt uit de overheidsplannen, gemarginaliseerde groepen integreren in het ontwikkelingsproces. Planners onderkennen dat bepaalde sectoren van de landbouwbevolking niet of nauwelijks of profijt hebben gehad van het landbouwbeleid. Ten vierde, moet de effectiviteit van het staatsingrijpen worden verbeterd in het licht van haar verslechterende financiële positie. Hiermee wordt onderkent dat een aantal beleidsinstrumenten, zoals het overheids toezicht op de opkoop van voedsel, niet of nauwelijks effectief en doelmatig zijn.

In hoofdstuk 4 komen in detail de ontwikkelingen in de landbouw sinds de onafhankelijkheid aan de orde. In die landbouw deed zich een enorme groei in productie en inkomens voor. Dit hoofdstuk laat zien welke ontwikkelingspatronen de landbouw vertoonde, mede bepaald door overheidsingrijpen. Deze patronen kunnen kortweg worden aangeduid met de twee-deling grote-boeren en kleine-boeren landbouw. Beide landbouwsystemen ontwikkelen zich op eigen wijze. De eerste met veel overheidssteun, de tweede met veel minder steun maar veel controle. De kenmerken van Kenia's agrarische structuur worden in dit hoofdstuk uitvoerig behandeld: landgebruik, de relatie voedsel productie door grote boeren en exportproductie door kleine boeren, 'commoditisering' van de productie, kontrakt-teelt, etc. De enorme expansie van de warenproductie verbergt echter een toenemende regionale ongelijkheid als gevolg van een gedifferentieerde integratie in de nationale markt en een sociaal-ekonomische differentiatie binnen de kleine boerenlandbouw als gevolg van enorme verschillen in inkomen en landbezit. Op basis van veel statistisch materiaal, verzameld door onafhankelijke onderzoekers en door de staat zelf, wordt geprobeerd een eerste inzicht te krijgen in het effect van overheidsingrijpen in de landbouw. Tevens wordt aan de hand van dit materiaal de traditionele twee-deling van de agrarische structuur in een kleine- en een grote-boeren landbouw van vraagtekens voorzien. De Keniaanse landbouw wordt door meer ontwikkelingspatronen en meer ontwikkelingsperspektieven gekenmerkt dan de kategorisering van de boerenbevolking in termen van 'groot' en 'klein' aangeeft.

In hoofdstuk 5 maken we kennis met de regionale kontekst: het Nandi Distrikt. Doelstelling van dit hoofdstuk is om het historisch specifieke van regionale ontwikkelingen en patronen te laten zien. Het overgrote deel van dit hoofdstuk heeft daarom een historisch karakter. Het poogt op distriktsnivo de sociaal- en politiek-ekonomische ontwikkelingen te rekonstrueren.

Allereerst worden de specifieke kenmerken van de Nandi als volk, hun geschiedenis, het langdurig verzet tegen kolonisatie en incorporatie, en vervolgens een geleidelijke incorporatie in de koloniale politieke en ekonomische systemen geanalyseerd. Dankzij een combinatie van gunstige natuurlijke voorwaarden (klimaat, bodem), de verhoudingsgewijs grote boerenbedrijven en de relatief lage bevolkingsdichtheid kan de Nandi-

samenleving (relatief gezien) rijk worden genoemd. Nandi Distrikt is één van de regio's in Kenia die profijt kon trekken uit het zich wijzigende landbouwbeleid van de koloniale overheid in de jaren vijftig. Landbezit werd geprivatiseerd en de overheid nam tal van maatregelen om de groei van de produktie en kapitalisering te bevorderen. Nieuwe technologische mogelijkheden (hybride mais) en nieuwe gewassen (thee, koffie) werden geïntroduceerd. Deze werden actief door de boeren in hun arbeidsproces geïntegreerd. De commercialisering van de produktie nam een grote vlucht. De maatschappij, in het begin een zogenaamde 'gelijke' maatschappij, werd echter naarmate de 'commoditisering' van de ekonomie voortschreed, steeds ongelijker. Er begonnen zich grote verschillen in rijkdom, land en macht tussen groepen Nandi alsmede tussen Nandi en Luhya voor te doen. Net als in andere regio's in Kenia, krijgen bepaalde groepen binnen de Nandi-samenleving een bevoorrechte toegang tot staatsfondsen (kapitaal), diensten (voorlichting) en kennis (technologie). Op basis van schaarse schriftelijke bronnen, onderzoeks-rapporten en jaarverslagen van de District Agricultural Officer, worden de kenmerken van de opbloeiende agrarische structuur van dit distrikt gekenschetst.

In het zesde hoofdstuk wordt de dynamiek van de agrarische structuur in Nandi-distrikt beschreven. Gewapend met de methodologische concepten die uitgewerkt zijn in hoofdstuk 1 (paragraaf 3), wordt deze ekonomie onder de loep genomen. Het empirisch materiaal is afkomstig uit een enquête onder boerenbedrijven, gehouden in de tweede helft van 1987. De enquête heeft zich voornamelijk gekoncentreerd op de produktie van mais. Onder welke omstandigheden wordt er geproduceerd, wie zijn de producenten, hoe zien hun bedrijven eruit, welke relaties onderhouden zij met de markt en in hoeverre is de reproductie van boerderij en boerenhuishoudens gericht op alleen maar landbouw? Het aldus verzamelde empirisch materiaal geeft inzicht in de diverse produktievormen, verschillende boerenstijlen, arbeidsprocessen en boerenstrategieën in het distrikt. Het onderzoek onderstreept dat sociale ontwikkelingen in de landbouw niet gekenmerkt worden door polarisatie binnen de boerenstand tussen kapitalistische boeren enerzijds en een klasse van landloze en bijna-landloze boeren anderzijds. Binnen deze extremen heeft zich in Nandi-distrikt een midden-klasse ontwikkeld die niet alleen springlevend is, maar ook zeer inventief en die wel degelijk in staat is eigen strategieën uit te stippelen conform eigen inzichten en mogelijkheden. Tevens onderstreept het onderzoek de stelling dat sociale ontwikkelingen in de landbouw gekenmerkt worden door een proces van verarming en verrijking. In dit proces speelt niet alleen de landbouwsector een rol. Ook de relaties van boeren met staats instituties, andere sectoren van de ekonomie en de relaties tussen produktieve eenheden in de landbouw spelen hierin een belangrijke rol. Mede als gevolg hiervan is een groep bestaande uit arme boerenhuishoudens en een groep rijke boerenhuishoudens te identificeren.

Met behulp van een kwantitatieve analyse kan tevens het effect van nieuwe technologieën op agrarische ontwikkelingen worden onderzocht. Ten tweede kan de bijdrage van deze technologieën in een samenspel met tal van andere onafhankelijke variabelen (zoals de arbeidsintensiteit, de organisatie van het arbeidsproces, sociale differentiatie, en de ligging van de boerderij in de agro-

ecologische zones die in het distrikt te onderkennen zijn) aan de produkteverhoging van mais worden gemeten Deze kwantitatieve analyse laat onder meer zien dat de bijdrage van zogenaamde Groene-Revolutietechnologieën aan de verhoging van de produktie slechts betrekkelijk is Bovenal laat het zien dat de hybride-mais-technologie geen doorbraak heeft kunnen forceren in de afhankelijkheid van de landbouwbeoefening van klimaat en bodem en geen einde heeft kunnen maken aan de sociaal-ekonomiesche verschillen tussen boeren

De vooronderstellingen uitgewerkt in 13 ten aanzien van heterogeniteit in de landbouw worden zo verklaard Het onderzoek onderstreept dat agrarische ontwikkelingspatronen gestuurd en beïnvloed worden door 'commoditisering' en institutionalisering en dat heterogeniteit in de landbouw in Nandi-distrikt geen toevallig verschijnsel is

Een aantal van de uitkomsten van de voorgaande drie hoofdstukken wordt in hoofdstuk 7 naar een hoger nivo getild het nationale nivo Op dit nivo wordt onderzocht of het overheidsingrijpen in de landbouw via tal van maatregelen (technologie-overdracht, markt- en prijsbeleid, toegang tot krediet en voorlichting, de oriëntatie van landbouwkundig onderzoek) effectief en doelmatig is Mede gebaseerd op een grote hoeveelheid literatuur wordt een beeld gegeven van het karakter van het staatsingrijpen en het karakter van de relaties tussen instituties en boerenbedrijven Tevens wordt bekeken of de verschillende instrumenten waarmee de staat intervenueert, afgestemd zijn op de realiteit

Een tweetal konklusies wordt getrokken In de eerste plaats de doelstellingen van de staat voor het ingrijpen in de landbouw via het markt- en prijsbeleid zijn bij lange na niet gehaald Het ingrijpen is in twee opzichten ondoelmatig en zelfs inefficiënt Zeker wat betreft het mais-opkoopbeleid, kan gesteld worden dat er eerder chaos dan een stabiele markt is ontstaan Slechts door het uitoefenen van druk door de Wereldbank en bilaterale donors op de Keniaanse overheid is de mate van staatskontrolle over de mais handel beperkt Deze hervorming heeft er echter nog niet toe geleid dat er nu wel effectief wordt ingegrepen in de mais-markt Het beleid van de staatsinstituties verantwoordelijk voor het vaststellen van prijzen, kan eveneens ondoelmatige genoemd worden Het prijsbeleid is niet gebaseerd op een goed begrip van kleine boerenstrategieën Het beleid vertoont zelfs de neiging het subsistentie-element in boerenstrategieën te scheiden van de marktgerichte komponent waardoor kleine boeren er toe neigen eerder voedsel voor zichzelf en hun huishouden dan voor de markt te produceren Mede door dit beleid, fluktueert het aanbod van agrarische produkten op de markt sterk en zijn in sommige perioden dure importen noodzakelijk om de tekorten aan te vullen

In de tweede plaats, kenmerkt het overheidsingrijpen in de landbouw zich door een ongelijkheid in de institutionele relaties tussen boeren en staat De interaktie tussen landbouwkundig onderzoek en ontwikkeling (voornamelijk georiënteerd op Westerse, moderne kennis) en het selektieve karakter van krediet- en voorlichtingsbeleid (ten nadele van kleine boeren en ten gunste van grote boeren), versterken de ongelijke verdeling van de materiele effecten van het staatsingrijpen in de landbouw

Het achste hoofdstuk is een retrospectief op staat, staatsbeleid en samenleving. Centrale vraagstelling in dit hoofdstuk is welke staat-samenlevingsverhoudingen zich hebben ontwikkeld sinds de onafhankelijkheid in 1963. Ten einde dit te onderzoeken wordt terug gegaan naar de periode vlak voor de onafhankelijkheid om te analyseren welke sociale krachten de onafhankelijkheid nastreefden en welke sociale krachten de staat bemanden en de staats-macht controleerden. De politiek-ideologische verhoudingen tussen staat-samenleving worden gekenmerkt door een essentiële verschuiving. Deze verhoudingen worden in de periode direct na de onafhankelijkheid gekenmerkt door de een toeëigening van de politieke macht door Kenia's heersende klassen. Deze macht reflecteert zich ondermeer in het landbouwbeleid van de staat: in markt- en prijsbeleid alsmede in het landbouwkundig onderzoeks- en ontwikkelingsbeleid en in de kredietverschaffing. Tevens wordt de staatsmacht aangewend om een politiek klimaat van sociale orde en rust te creëren, middels co-optatie en een ogenschijnlijke herverdeling van de rijkdom. Als, echter, door een combinatie van negatieve externe factoren (dalende wereldmarktprijzen voor de voornaamste exportprodukten) en interne factoren (toenemende sociale ongelijkheid en politieke oppositie (tegen het Kenyatta-regime) de legitimiteit van de staat ondergraven wordt, is er een kentering waar te nemen in staat-samenleving verhoudingen. Deze kentering leidt tot nieuwe verhoudingen waardoor de Keniaanse heersende klassen in politiek opzicht steeds vaker aan de zijlijn komen te staan. Hun mogelijkheden om invloed uit te oefenen op beslissingen van de staat zijn aanzienlijk verminderd. Dat zij echter in staat zijn op een andere wijze het staatsbeleid te beïnvloeden wordt duidelijk als de overheid in 1979 een krediet-verschaffingsprogramma dat voornamelijk ten goede is gekomen aan de grote boeren, afschaft. Een dalende produktie van mais voor de binnenlandse markt is het direkte gevolg van een verslechtering van de produktievoorwaarden in deze belangrijke voedselsektor. De overheid ziet zich gedwongen het kredietprogramma wederom in ere te herstellen. Het huidige regime probeert manhaftig van begin af aan zijn legitimiteit ten opzichte van de lagere klassen te versterken. Het succes is echter minimaal gezien de sterke politieke oppositie, van rechts en links en van de kerk tegen de hardnekkige pogingen van president Moi de één-partij-staat te handhaven.

Een analyse van deze maatschappelijke krachten vormt tevens de basis voor een inschatting van de effectiviteit en doelmatigheid van het staatsingrijpen in de landbouw. Effectiviteit en doelmatigheid daarvan zijn gering omdat dominante maatschappelijke groepen de staat blijken te kunnen gebruiken ten eigen voordeel. De noodzakelijk geachte herstructurering van de mais-opkoop wordt teniet gedaan door invloedrijke boeren en handelaars, een groep aktoren die tot het 'blok aan de macht' behoort. Tevens heeft het landbouwkundig onderzoeks- en ontwikkelingsbeleid tot op heden voornamelijk ten dienste gestaan van de belangen van de grote-boeren sektor.

Een tweede verklaring voor ondoelmatigheid en ineffektiviteit van staatsingrijpen is dat de staatsburokratie niet bij machte is de behoeften van de landbouwende bevolking te identificeren. Deze onmacht van de staatsburokratie blijkt ondermeer uit het door haar impliciet gehanteerd klassifikatie-schema van kleine- versus grote boeren. Dit eenvoudige klassifikatie-schema vormt echter wel uitgangspunt voor beleid en voor de indentifikatie van behoeften. Voorgaande hoofdstukken hebben laten zien dat

er een veelvoud van boerenstrategieën en boerenstijlen is. Het niet-onderkennen van deze verscheidenheid zorgt telkenmale voor het uniforme technologie-beleid van de Keniaanse overheid. Een gemiste kans zoals met name uit hoofdstuk 6 en ander onderzoek blijkt: er zijn meer ontwikkelingsperspektieven te identificeren die niet door de tweedeling 'klein' of 'groot' kunnen worden gevangen. Bovendien is er meer ontwikkelingspotentieel onder boeren aanwezig dan wordt verondersteld; een potentieel dat echter niet systematisch aangeboord wordt door de overheid.

In hoofdstuk 9 worden de belangrijkste konklusies geplaatst tegenover de theoretische uitgangspunten zoals die zijn uitgewerkt in hoofdstuk 1. Aan de hand van een kritische evaluatie wordt de noodzaak aangegeven voor verdere theoretische uitwerking van het begrip structurele heterogeniteit in de landbouw.

In Appendix I worden de methode en de steekproefgrootte van het Nandi-onderzoek nader uitgewerkt.

STELLINGEN

behorende bij het proefschrift

The Agrarian Structure in Kenya:

State, Farmers and Commodity Relations

van Paul Hebinck

1.

Het is toe te juichen dat de wetenschappelijke discussie over ontwikkelings-theorieën, in tegenstelling tot het verleden, niet meer bepaald wordt door meta-theoretische uitgangspunten maar door empirisch onderzoek op meso- en mikro nivo; daarbij mag men hopen dat de ontwikkelings-theorieën uit een impasse komen doordat er een interactie ontstaat tussen theorieën en empirisch onderzoek.

2.

De leverantie van kunstmest in het kader van betalingsbalanshulp zorgt bij donors voor minder geworstel met bestedingsproblemen en stelt tevens het ontvangende land in de gelegenheid om het formuleren van een alternatief bodembemestingsbeleid uit te stellen.

3.

De oprichting van de Moi Universiteit in Eldoret tesamen met de ongekennde repressie tegen linkse intellektuelen in het algemeen en op de Universiteit van Nairobi in het bijzonder (zie o.a. *Overzicht*, juni 1989), verzwakken de positie van de Universiteit van Nairobi die vanaf haar oprichting een cruciale rol in het maatschappelijk veranderingsproces heeft vervuld; elke vorm van medewerking aan het totstandkomen van de Moi Universiteit van de kant van donoren en universitaire instanties is vanuit dit perspectief uit den boze.

4.

Indien men het er over eens is dat het bereiken van een maatschappelijke consensus een noodzakelijke voorwaarde is voor rurale ontwikkeling in Afrika (World Bank, 1989) dan zouden in het kader hiervan lokale ontwikkelings-perspektieven zoals die leven onder boeren en door hen onder uiteenlopende voorwaarden in de praktijk worden gebracht, betrokken moeten worden in de discussie over het thema 'wat is ontwikkeling'. Ook zouden democratische 'grassroot' organisaties de politieke ruimte moeten krijgen om het discours van de rurale bevolking (de 'doelgroep') te ondersteunen. Tenslotte zouden overheidsburokratieën hun kennis van de regionale/lokale agrarische structuur en lokale ontwikkelingsprocessen moeten vergroten en verdiepen.

5.

Indien we de konklusies van empirisch onderzoek naar de organisatie van het arbeidsproces in de produktie van hybride maïs in Nandi distrikt vertalen naar de organisatie en orientatie van Nederlandse hulp aan Derde Wereldlanden, zou dat voor de Nederlandse bijdrage inhouden dat naar een meer sporen beleid op het terrein van landbouwtechnologie ontwikkeling en -overdracht moet worden gestreefd.

6.

De belangrijkste konklusies van verschillende Nederlandse evaluatie-missies en -rapporten ten aanzien van de bijdrage van de activiteiten van de National Seed Quality Control Service aan de verhoogde produktie van maïs en aan de verbetering van de inkomenspositie van kleine maïsboeren in Kenia op basis waarvan telkenmale weer werd besloten het projekt te verlengen, zijn enkel staande te houden bij de gratie van onwetendheid omtrent de konkrete organisatie van de maïsproduktie in Kenia.

7.

Het veelal gepresenteerde beeld dat landbouwopbrengsten in Afrika eerst en vooral dalen en stijgen door klimatologische omstandigheden, verduistert de zeer belangrijke rol van politiek-ekonomische oorzaken voor die daling of stijging.

8.

Het alom levende idee dat integratie in de geld-ekonomie bij voorbaat negatief beoordeeld moet worden, veronachtzaamt ten eerste dat kleine boeren zelf deze integratie nastreven, en ten tweede dat een negatieve evaluatie pas waarde heeft op basis van een konkrete analyse van de sociaal-ekonomische omstandigheden waaronder kleine boeren wonen, leven en werken.

9.

De redaktie van het tijdschrift *Derde Wereld* zou in het licht van vallende muren en verschuivende paradigma's in de ontwikkelingstheorieën ten aanzien van het bestaan en ontstaan van een Derde Wereld, zich moeten bezinnen op een naamsverandering, ondanks dat marketing-overwegingen, zoals naamsbekendheid, een dergelijk besluit bemoeilijken.

10.

Als de bekende Keniaanse muziekgroep *Simba Wanyika* zich in haar liedjes wat minder zou concentreren op geld en liefde zou het kunnen bijdragen aan de verheffing van de boerenstand in Kenia, zoals de boeren-rockgroep *Normaal* dat doet met betrekking tot de boerenstand in de Achterhoek.

This study analyses the effectiveness and efficiency of state intervention against the background of the emerging heterogeneous agrarian structure in Kenya. Since the colonial period the state established itself as a major force to ensure the commoditisation of the agricultural economy. State power, exercised through several institutions, is increasingly used to guarantee the operation of the market through various marketing and price regulations as well as to influence the trajectory of agricultural development by its involvement in agricultural Research and Development.

Using the extensive body of literature dealing with the agrarian structure in Kenya and by incorporating the results of a survey carried out on the farm-level in Nandi District, the author argues that state policy has become side-tracked by political manoeuvres of Kenya's 'big men' as well as by incompetence of the state bureaucracy itself. The inability of bureaucrats to grasp the structural variance of Kenya's agrarian structure and the resulting bias in the relations between state apparatuses and the peasantry are indicative. This did not prevent, however, that within the niches of the emerging agrarian structure a significant and diversified growth is taking place. The Kenyan middle peasantry in particular represents a considerable source of endogenous development potential which is left untapped by state policy.

The 'Nijmeegs Instituut voor Comparatieve Cultuur- en Ontwikkelingsstudies' (NICCOS - Nijmegen Institute for Comparative Studies in Development and Cultural Change) of the Catholic University of Nijmegen, The Netherlands, was established in 1989 in order to co-ordinate and stimulate the research in the Third World and in peripheral regions of the industrialized countries carried out by the Department of Cultural and Social Anthropology, the Department of Geography of Developing Areas, the Third World Centre, the Centre for Women's Studies, the Missiology Department and the Department of Middle East Languages and Cultures.